

Full Employment

by

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To
the Unemployed Men and Women
of America

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JOHN H. G. PIERSON

Contents

Introduction	I
The "solution" at the expense of foreigners	5
Planned production or production for market	10
The extent of unemployment	15
Contents of this book	23

Part One. Point of Departure

Chapter I. Full Employment	29
Involuntary unemployment	29
The interpretation of unemployment statistics	37
Full employment versus "optimum allocation"	40
Chapter II. "Allocation"—the Secondary Problem	44
The complex character of "optimum allocation"	46
The question of income distribution	49
Other aspects of "optimum allocation"	55

Part Two. The Alternative Approaches

Chapter III. Planned Production and Production for Market	65
Alternative principles of output determination	67
Monopolistic production	72
Production for market contrasted with <i>laissez faire</i>	78
Two types of economic system	83
New Deal policy and traditional Republican policy	89
Chapter IV. Full Employment by Planned Production	95
General procedure for full employment under production planning	96

The Soviet Union	99
Planned production and the "optimum allocation" issue	101
Chapter V. First Principles of a Full-Employment Market Economy	112
The need for an independent regulator other than public works	112
The monetary circulation in general and consumer spending in particular	116
Production expense and purchasing power—the cart and the horse of economics	128
Conclusions and general summary, with emphasis on "na- tional income insurance"	135
Part Three. A Full-Employment Market Economy	
Chapter VI. The Factors Governing Employment	141
Wage rates and the volume of employment	145
Necessary profit, taxes, interest, and other financial charges	147
Replacement timing, anticipations, and "confidence"	153
The volume of production and the volume of employment: changes in technology, wants, and other data	160
Summary	168
Chapter VII. Some Guides to Policy	170
Price-level policy	170
Individually purchased consumption output and other final output	176
Consumer credit	180
Foreign investment	184
Capital formation and interest-rate policy	194
Summary	210
Chapter VIII. Monetary Controls	213
The flow of money between production and consumption	213
Avoiding inflationary excessive spending	222

Avoiding deficient spending	228
Public borrowing, taxation, or noninterest-bearing notes	233
The problem of quantitative estimates	246
Monetary principles of a full-employment market economy	247

Part Four. Conclusion

Chapter IX. Ends and Means	253
Ricardo's system, America today, and a full-employment market economy	256
Workers, entrepreneurs, and income savers	264
Some political considerations	268
Index	275

Introduction

THE crux of a sound policy for the United States is the knowledge that domestic economic measures and domestic economic measures alone can bring permanent prosperity and full employment. Many are inclined to say that sound domestic policy is one thing and sound foreign policy another. But in the long run the latter is impossible without the former.

The two halves of this thesis both deserve the closest scrutiny. First, that the United States can have lasting and guaranteed full employment without resorting to external expansion or aggression in any shape or form, if the American people will understand the conditions making that possible and will insist upon having them. Second, that lasting and guaranteed full employment can never be achieved by means of a conventionally vigorous economic foreign policy—which at best can make temporary jobs, probably for the most part in munitions plants or with the nation's armed forces.

This book, however, will deal at length with the first of these contentions only, for the pitfalls of "mercantilism," economic imperialism, and anything of that kind appear to have been better described, at least, than the home possibilities.¹ Regarding the pitfalls referred to a few preliminary remarks will be sufficient. A beginning may be made by advancing certain working assumptions about the essential interests of the American people in foreign affairs.

1. Foreign trade and lending will however be brought back into the picture in chap. vii. (The policy commonly known as mercantilism, so far as it relates to the argument, is explained just below)

1. That the United States should arm itself adequately and efficiently, for defense of home territory.

2. That, so far as trade and loans are concerned, the utmost clarity is necessary in distinguishing between two fundamentally different things—on the one hand the *volume* of industrial and all other production activity (as reflected, for example, in the general business index) and on the other hand the *degree of effectiveness* with which the employed resources are utilized (as judged by the amount of result obtained for the effort put in)—and that from this distinction the following practical conclusions stem.

(a) Grant that the United States is of all nations the most fortunately endowed in the extent and variety of its known natural resources, and with the passage of time tends to become less dependent on other parts of the world in a trading sense, rather than more so;² nevertheless it would be greatly embarrassed if its present foreign commerce were altogether cut off and benefited if world trade in general were to revive. So far as imports are concerned, there are certain crucial raw materials such as tin which the United States must secure from abroad because it cannot at present produce them. The development of synthetic substitutes, as in the case of rubber, is steadily making this list of *essential* imports shorter, but obviously the nation's supply of the remaining items must be safeguarded against

2. Quite aside from emergency measures directed toward wartime self-sufficiency, the countries of the world all appear destined to become more nearly self-sustaining in future. For example, Hogben believes that even now aluminum and magnesium are ready to bring the age of coal and iron to a close, inasmuch as these new light metals, whose sources are universally distributed, can be had by harnessing universally distributed sources of power. Lancelot T. Hogben, *Retreat from Reason* (Random House, 1938), pp. 37, 39.

any contingency.³ There is also a much larger category of commodities that, in spite of their being physically obtainable at home, it is *advantageous* to secure from abroad, paying for them by the export of commodities produced with relative efficiency in this country. Advocacy of free trade has commonly been tied up in the past with the unrealistic assumption that tariffs and the like can never have anything to do with the volume of employment—because, according to classical doctrine, there is always bound to be full employment “in equilibrium” in any case. The free-trade thesis has sometimes been discredited further by being so narrowly interpreted as to leave long-run and “non-economic” considerations out of account. Yet it holds this vital element of truth: *provided full employment can be assured independently*, standards of living will certainly be raised to the extent that an interchange of goods and services is permitted to take place based on regional specialization in accordance with the law of comparative advantages. Finally, turning specifically to the question of exports, any loss of our established foreign markets is always disturbing to our economy as a whole *unless compensated by an expansion of other markets, such as home markets*; and it is of course locally disturbing in any case—to our cotton farmers, for instance—so that every peaceful effort seems called for to try to prevent sudden dislocations of this kind from occurring.

3. The National Resources Committee lists eight strategic minerals (tin, nickel, manganese, asbestos, chromite, bauxite, antimony, and graphite, the first three being the most important) for which the United States is dependent on foreign sources. “A two years’ war supply of these items, if they could be obtained at 1935 prices, would cost only approximately 114 million dollars, while a year’s peace time requirement in 1937, measured by the imports of that year, was purchased for 163 million dollars.” *The*

(b) The notion that our national prosperity depends on our foreign customers, in the sense that we cannot run our economic plant at high tempo and thus get rid of unemployment without them, is sheer delusion. Useful as this notion is to certain special interests, it is worse than useless to the general public, with whose chance for life, liberty, and the pursuit of happiness it is supposed to be concerned. For it means that foreign trade must take up the slack (cause a *net* expansion, that is) in our system of production; and this plan will not work for any length of time unless American exports can be made to exceed American imports or unless American businessmen can get their costs of production down by exploiting cheap sources of raw materials or cheap labor in other countries. Consequently it requires that we receive gold in payment for excess exports—but we hold three fourths of the world's gold in our vaults already;⁴ or that we cover our excess exports by lending abroad (i.e., by foreign investment)—but our experience with that kind of boomerang in the 'twenties was disquieting to say the least; or that we go in for crude economic imperialism. Much of this is an old story all over the globe. Yet one may venture, at the risk of having psychologists take exception, that at this late date very little of it will tempt the average citizen of this country, once he penetrates to the underlying realities.

Structure of the American Economy. Part I—Basic Characteristics (U. S. Government Printing Office, June, 1939), p. 26.

4. The *Federal Reserve Bulletin* indicates that at the end of August, 1940, the gold reserves of the central banks and governments of fifty-odd reporting countries totaled just under 28 billion dollars, of which the U. S. Treasury had 20.9 billions, or 75 per cent. The world total is incomplete, notably because it omits gold in the exchange funds of various governments, gold in circulation or in private hoards, and the holdings of the U. S. S. R. The U. S. figure excludes 1.7 billions held by Federal Reserve banks under earmark for foreign account

The "Solution" at the Expense of Foreigners

DOWN to the present time such trading policies as are here called in question have commonly prevailed as between commercial nations.

In his notable work on *Mercantilism*,⁵ Professor Heckscher has made it abundantly clear how English and Continental writers on economic policy from the fifteenth century onward were obsessed with the "fear of goods"—that is to say, the fear of inadequate markets and consequent unemployment. Protectionist legislation was believed to be necessary for the sake of securing markets for domestic producers and work for the home population at the expense of foreigners, and in order to bring about an influx of monetary metal, which would further stimulate home production. Thrift was regarded as dangerous; it caused unemployment by withdrawing money from circulation. The author observes:

It required the unqualified faith of doctrinaire *laissez-faire* to wipe out the "fear of goods" . . . the most natural attitude of the "natural man" in a money economy. Free trade denied the existence of factors which appeared to be obvious, and was doomed to be discredited [that is, after temporarily finding favor] in the eyes of the man in the street as soon as *laissez-faire* could no longer hold the minds of men enchained in its ideology.⁶

The classical school virtually expunged the problem of general underemployment from respectable economic discussion.⁷ Marx, on the other hand, asserted that capitalism

5. Eli F. Heckscher, *Mercantilism*. English translation, London, G. Allen & Unwin, Ltd., 1935. See II, 121-125, 178, 208-209.

6. *Ibid.*, II, 335. Professor Heckscher, it may be noted, tends to criticize mercantilist theories from the standpoint of classical economics.

7. See John Maynard Keynes, *The General Theory of Employment, Interest, and Money* (London, Macmillan & Co., Ltd., 1936), esp. p. 364.

of inward necessity increasingly recruits a "relative surplus-population" or "industrial reserve army"⁸ (a point whose central importance for Marxian theory has recently been reemphasized by Professor Lange⁹), and from the whole body of analysis from which this view derived it was only a short step to the Marxian theory of imperialism.¹⁰

In the most challenging economic work of recent years, Keynes expresses the view that the ability of England to maintain a "reasonably satisfactory" level of employment during the nineteenth century—a level "substantially below full employment, but not so intolerably below it as to provoke revolutionary changes"—was due to a combination of circumstances not likely to recur in the future. Among these circumstances were "the growth of population and invention, the opening-up of new lands, the state of confidence and the frequency of war over the average of [say] each decade"; also a sufficiently strong tendency to spend money income rather than save it, a relatively great bargaining power on the part of employers of labor, and a monetary system that was conservative and yet flexible. Operating all together these factors maintained a condition of balance characterized, generally speaking, by a profit incentive that kept most of the wheels of production turning.¹¹

Regardless of whether one agrees in whole or in part with any of the theories just cited, one may well be cautioned by them, or at least by the sweep of history of which these writers have given us their account; first, that the causes of unemployment are deeply rooted in our society,

8. *Capital* (Kerr ed.), I, 689-703.

9. Oskar Lange, "Marxian Economics and Modern Economic Theory," *Review of Economic Studies*, June, 1935.

10. As developed by Lenin especially.

11. Keynes, *op. cit.*, pp. 307-309.

and second that in many respects the "natural" escape or attempted escape for any single country lies in economic struggle against the outside world.

So far as the latter point is concerned, it is after all no more than elementary common sense that economic depression, as it restricts the farmer's market, closes down mills and factories, and abolishes the breadwinner's job, sharpens the antagonisms among nations and races. In their efforts to find work for idle hands and idle dollars, the citizens of one nation, if no domestic solution for their difficulties is in sight, inevitably press outward for larger export markets and cheap sources of raw materials and fields for investment, at the same time trying to keep foreigners from underselling them in home markets and begrudging employment to immigrants or any who can be construed as belonging to alien groups.¹² If they succeed in these efforts, the international pressures are not abated, since such success tends to be achieved at the cost of increasing the unemployment problem in other countries.

Let us observe parenthetically that this contest is not confined to the international arena. The same forces that intensify economic rivalries among nations also intensify economic rivalries among regions and localities. In the Middle Ages each community's hand was against its neighbor's, as was manifest in the innumerable local tariff duties and the like that everywhere restricted trade. And in the United States today we are witnessing a striking revival of local protectionist sentiment. At the present moment there are probably at least a thousand laws interfering with free

12. "If Congress makes provision for continuation of the committee, which will expire January 3, Mr. Dies said that the investigation ultimately would result in the 'deportation of no less than 7,000,000 aliens employed in American industries while Americans go without employment.'" *New York Times*, December 24, 1939.

trade on the statute books of our several states, not counting administrative orders that convert innocent-seeming laws into barriers to the flow of goods and labor. To evade the clause in the Constitution that denies to states the power to levy import or export duties, these barriers are disguised as inspection laws, quarantine laws, tax laws, and so forth.¹³

The mutual antagonism of depressed economic systems is not to be overcome by technical measures regulating their dealings with one another. It has often been pointed out how, under the traditional international gold standard, with its fixed pars of exchange, the dangerous tendency for one country to subject other countries to deflation was unavoidable. But the abandonment of an old-fashioned monetary rule does not in itself solve the problem. Competitive monetary devaluation struggles may be equally disastrous, as the world has had some occasion to learn in recent years. Regardless of the basis on which international trade and loans may have been arranged, any nation that finds itself unable to keep its economic machine running approximately at capacity is bound to try somehow to dump this problem on the lap of the nations beyond its borders.

Of course this frequently works itself out in subtle and devious ways. But if circumstances are such that a powerful nation is unable to succeed with peaceable aggression, the process will work itself out explosively, in war. Superficially the war may then appear to be wholly due to other, psychologically more satisfying causes, and for the victim

13. For details see, e.g., the Special Report by the Bureau of Agricultural Economics entitled "Barriers to Internal Trade in Farm Products" (U. S. Government Printing Office, March, 1939), and "Comparative Charts of State Statutes Illustrating Barriers to Trade between States," prepared as part of the Marketing Laws Survey undertaken by the Works Progress (now Works Projects) Administration (May, 1939); also hearings on interstate trade barriers conducted by the Temporary National Economic Committee, March 18-21, 1940.

this may indeed be the real fact of the matter. Moreover, a nation going into war may perhaps have solved its unemployment dilemma some time before by throwing all its energies into preparation for war.

It is not necessary or wise to take the extreme position that modern war has no other roots than the drive for markets and for economic empire generally. Even supposing that were true, no one country could solve its problems by merely setting its own economic house in order, since then it might still be attacked by a hungry foreign power. But these concessions, and the legitimate deductions from them, are all that can safely be allowed. The case against any mercantilist or imperialist offensive against unemployment remains.

Here is where the argument of this book rightly begins. As stated, the book aims to show that the United States can have lasting and guaranteed full employment without resorting to external expansion or aggression in any shape or form, if the American people will understand the conditions making this possible and will insist upon having them. Jobs and permanent peace are very generally desired. Proof seems unnecessary, though in deference to the current vogue for public-opinion studies it can be recalled that a Gallup poll conducted after several months of warfare on the other side of the Atlantic brought out the fact that in the judgment of the man in the street "keeping out of war" (47 per cent) and "solving unemployment" (24 per cent) overshadowed all other issues when it came to naming "the most important problem before the American people today."¹⁴ Considering the circumstances at that time, this vote must be taken as expressing a deep-seated

14. Some sixty other issues were referred to in this opinion study, none receiving more than 6 per cent of the vote; see the *New York Times*, December 3, 1939.

attitude that will persist, not one engendered by panic or propaganda.

Planned Production or Production for Market

ONE way to have full employment is to plan all production from the center. Perhaps, if world conditions remain chaotic, we may change our customs in the interests of national defense to the point where such a solution, or an approximation to it, is definitely foreshadowed. But the argument of this book mainly revolves around an idea not so easy to grasp—that the United States could also abolish unemployment without giving up its decentralized economic initiative. Less space will be devoted to considering the direct planning of production itself than to considering how the monetary mechanism might be planned so as to fit in with the philosophy and practice of production for market.

The terms, "market economy" and "system of planned production," are reasonably self-explanatory, so that detailed investigation of them can wait.¹⁵ If we think of a full-employment market economy and a full-employment system of planned production as alternatives—not of course denying that some planned production will also be found in any market economy—it is clear that each solution has its own characteristic technical difficulties as well as its own

15. See chap. iii. It may, however, be well to mention at once that the literature of "planning" is full of interpretations of "planning" and "the market" that do not exactly coincide with the distinction drawn in this book. As used herein, a system of planned production is one in which, specifically, the outputs of individual industries and production units are planned and controlled by public agencies, on the basis of some sort of balancing of social costs and returns, while production for market implies that the individual scale of output is decided on the basis of a balancing of the unit's own (anticipated) costs and returns.

advantages. Because of the obvious advantages attaching to a continuation of long-familiar practice so far as that is compatible with the assurance of work to all who are willing and able to work, it is especially important that the technical problems of a full-employment market economy be seen in true perspective. The fact that these problems are by no means insoluble should give hope to all who, though they stand appalled at the unemployment evil, still doubt if this curse can be lifted from the land without admitting a kind of centralization that seems to clash with traditional American values.

At the same time let us try not to be utopian. The difficulty of abolishing unemployment is bound to be underestimated if attention is focused entirely on questions of method. For the basic fact about full employment, regardless of whether it is achieved under production planning or under production for market, is that the removal of the threat of involuntary idleness would give labor a stronger bargaining position—unless, of course, undemocratic means used to bring about the new conditions should destroy labor's bargaining position entirely. Full employment would therefore tend to give labor a larger share of the national income. This ought to be recognized at the outset.

Naturally it does not follow that labor alone would gain. The expansion of markets as the country went back to work would immediately benefit farmers and businessmen with goods and services to sell. If in the course of time the rise in the total national output or income (due at first to the reemployment of idle men and idle plant, and then to technological progress, etc.) brought with it a shift in favor of earned incomes, this would not necessarily mean that unearned incomes would grow absolutely smaller. As an arithmetical proposition it is self-evident that, even where

the recipients of different forms of income are affected unequally by an enlargement of the total to be divided, it is possible for some forms of income to rise in the aggregate while others remain constant, or for all to rise in some degree. In the second place, if earned incomes should in fact increase faster than total output, so that unearned incomes actually declined, most persons would have more than before from both sources taken together. Finally, very few of those providing exceptions to this rule would have a larger interest in preserving their unearned incomes intact than in sharing in the general security resulting from the abolition of depressions.

However, it cannot be assumed that this would be true, or would be thought to be true, in all cases. And if anyone placed his interest in defending his unearned income and his position of economic power against eventual encroachment ahead of his interest in living in a stable and prosperous community, then he would oppose full employment, or at least would oppose full employment in combination with democratic procedures, so that national policy would be unsafe in such hands.

This, it must be emphasized, is a practical issue raised by full employment as such and not a technical issue depending on the way production is organized. Take a market economy, for instance. It is not inevitable that attempts to raise real wages should be frustrated by price inflation, as sometimes seems to be almost taken for granted. For price inflation can be prevented from occurring by the imposition of social control over the dollar volume of final consumer income and spending.¹⁶ In fact this is, or so it will be argued, the most important single element of control for a full-employment market economy. Neither is it clearly

16. See below, chap. v ff., esp. chap. viii.

impossible, just because production for market depends on labor not costing the employer more than the value imputed to labor's services, for the wages finally received to exceed "marginal productivity" rates. For if it is desired to use taxation for purposes of redistribution, even to the extent of subsidizing payrolls specifically, that can of course be done.

In other words, those who want to abolish unemployment should face up to the opportunity and the danger involved—the opportunity for the distribution of income to be settled in a truly democratic manner, the danger that democratic procedures may be sacrificed through the efforts of those who object to submitting this question at the bar of public opinion.

No doubt the attempt to realize this opportunity and avoid this danger will put to the test much that is fundamentally part of our philosophy of life. How do we as a nation really feel about economic inequality? It is hard to judge in advance of a fair trial just where the point lies at which the equalitarian sentiment of the average American would be overbalanced by his desire to have a chance to be richer than the next man. Yet the location of this point has a good deal to do with the question, to what extent direct bargaining at the point of production would provide a satisfactory division of income—at least if the excessive profits of monopoly were curbed by coöperatives, by public regulation, or otherwise—and to what extent this issue would be settled in the larger political arena. Would wage rates finally be fixed by public commissions? The demand that trade unions be made "responsible," with the right to strike qualified or denied, would be heard very frequently if conditions in the labor market were inherently favorable to labor. Indeed it seems fair enough to ask if workers' or-

ganizations, like other organizations, and individuals, not excluding here the agencies of public opinion themselves, should not in the last analysis be responsible to real majority opinion. If, then, it was proposed to give public representatives an authoritative voice in the determination of scales of pay, the practical question for believers in the democratic process would appear to be this. Would the commissions or other public representatives in whom it was proposed to vest this power give true expression to majority public opinion, as developed on the basis of a school system, a press, a radio, and so on serving no interest narrower than the whole community's interest in securing a free and full discussion of every issue?

The complexity of the choices confronting a nation determined to move forward into permanent full employment, more especially when these choices must be made in a war-torn world, is apparent enough without any further elaboration. However, this book—which deals merely with the more strictly economic aspects of the problem as a whole—proceeds on the assumption that the risks here briefly referred to must be accepted, if popular government is to endure. For unemployment itself robs democracy of reality. And democracy's very power to appeal to the hearts and minds of men will be gone before many to-morrows unless a fighting program is found that goes beyond the mere defense of civil liberties, crucial as that clearly is.

Unemployment has quite properly been compared to slavery.¹⁷ It is also the source of intolerable waste. The

17. "Today a new form of slavery has been created. This is an economic slavery, a slavery that we seek to hide from our own eyes by calling it unemployment. . . . This is a slavery that does not shut men in, it shuts them out." Wendell L. Willkie, address delivered in Cincinnati, quoted from the *New York Times*, October 17, 1940.

dollar amounts paid out for relief to the jobless over the last decade can readily be counted, if one cares to add up the statistics. The enormous losses from goods and services that might have been produced, and have not, can be measured in approximate fashion.¹⁸ Although the damage that the unemployed themselves have sustained, and the mounting strain of insecurity on those who have kept their jobs, will never be computed, they make too grave a burden to be borne forever.

There is common agreement that this chapter in our history should come to a close.

If enduring full employment is to be won in a society in which complexity of organization generally, and division and interdependence of labor in particular, have gone as far as they have in ours today, the conditions for full employment must be *organized*. In effect society itself must guarantee, indirectly by sustaining the market or directly by providing public jobs, that all who are willing and able to work will find work to do. If the American people agree that this is desirable, it follows that they cannot permit anyone to block that guarantee. They must affirm that no person or persons in this country shall directly or indirectly hold a monopoly in dispensing that most fundamental of opportunities—the opportunity to make a living.

The Extent of Unemployment

IN April, 1940, according to the best estimates available, there were nine to eleven million workers unemployed in

18. The National Resources Committee estimates the loss in potential real national income due to depression unemployment of men and machines, 1930 through 1937, at 200 billion (1929) dollars (*The Structure of the American Economy*, Pt. I, pp. 2, 371)—enough to have provided a new \$6,000 house for every family in the country or to have rebuilt the country's entire existing agricultural and industrial plant (*ibid*, pp. 3, 27)

the United States.¹⁹ In other words, ten years after the problem began to assume its present massive proportions, challenging society's efforts to discover a solution, there were still approximately as many persons out of work as in 1935, two or three million more than in 1937, and some eight million more than in 1929. The accompanying table shows that, from a relatively low plateau during the prosperity years following the depression of 1921, the number of unemployed rose to a peak of fourteen millions or more in March, 1933, was cut in half by the revival culminating in the summer of 1937, and later returned to the levels of 1934-36.²⁰

Our unemployment statistics are, unfortunately, far from perfect. No one claims that any of the available estimates is strictly reliable. The data on which computations were based before 1930 were sketchy. Later estimates start as a rule from the 1930 census data on (a) unemployment and on (b) the number of "gainful workers" (that is, those usually following a gainful occupation), subtracting (a) from (b) to obtain (c) the number of persons actually at work in April, 1930, applying the employment indexes published by the Department of Labor and other agencies to (c) in order to calculate (d) total employment in any subsequent month, and finally obtaining a figure for unemployment by allowing for (e) the estimated net growth

19. See the accompanying table; but cf. also footnote 23 below. So far as the seasonal factor is concerned, April figures tend to run only slightly ahead of the yearly averages.

20. A rough idea (more cannot be claimed) of the extent of unemployment in the preceding generation can be obtained from the estimate that during the period 1897-1926 unemployment (including sickness and disability) in manufacturing, transportation, the building trades, and mining fluctuated between a low of 5.5 per cent and a high of 23.1 per cent, averaging 10.2 per cent; Paul H. Douglas and Aaron Director, *The Problem of Unemployment* (The Macmillan Co., 1931), pp. 28-29.

Estimates of the Volume of Unemployment in the United States

(Average monthly number of workers unemployed, in millions.)

Year	Wolman and Givens <i>a</i>	Alexander Hamilton Institute <i>b</i>	American Federation of Labor <i>b</i>	National Industrial Conference Board <i>b</i>	Robert Nathan <i>b</i>	Congress of Industrial Organizations <i>c</i>
1920	1.4					
1921	4.3					
1922	3.4					
1923	1.5					
1924	2.3					
1925	1.8					
1926	1.7					
1927	2.1					
1928						
1929		3.5	1.9		1.8	1.8
1930		6.9	4.7	3.8	4.6	4.7
1931		10.9	8.6	8.1	8.1	8.3
1932		14.7	12.9	12.5	11.6	12.1
March, 1933		16.5	15.1	14.8	13.8	14.5
1933		14.4	13.3	12.7	11.9	12.6
1934		12.4	11.4	10.4	10.0	10.8
1935		11.6	10.7	9.5	9.1	10.1
1936		10.0	9.4	7.6	7.7	8.8
Sept., 1937		7.6	7.5	5.1	6.1	7.0
1937		8.4	8.3	6.4	6.9	8.1
1938		12.0	10.9	10.1	9.9	11.0
1939		11.0	10.2	9.1	9.8	10.8
April, 1940		10.7	10.2	9.0	10.2	11.3

- a. Figures from Leo Wolman, in *Recent Economic Changes* (McGraw-Hill Book Co., New York, 1929), II, 478. Agricultural workers excluded.
- b. A. F. of L. series from latest *American Federationist* revision; others based on monthly figures supplied to the author by the Bureau of Research and Statistics of the Social Security Board. Agricultural workers included in these estimates. (Figures are currently reported by the Alexander Hamilton Institute in *Business Conditions Weekly*, in the *American Federationist*; and in the Conference Board's *Economic Record*—formerly the *Conference Board Bulletin*; Robert Nathan's data were originally prepared for the President's Committee on Economic Security, and published in the *International Labour Review* of January, 1936, but have appeared regularly only in the *Social Security Bulletin*, issued by the Social Security Board's Bureau of Research and Statistics. The *Bulletin* for June, 1939, gave prior monthly figures for all four series, these estimates differing in certain cases, because of recent revisions, from the figures used in calculating the averages shown above.)

in the working population. This procedure leaves room for discrepancies in results as between the various series published, since authorities differ regarding the number of workers added to the labor supply each year, the way the basic 1930 unemployment data should be interpreted or revised, the corrections to be made on account of sample studies, and so on.²¹ Obviously, then, any given unemployment estimate must be accepted with reservations. Nevertheless, and in spite of certain qualifications when we speak of involuntary unemployment specifically in terms of the definition used in this book (which is given in Chapter I), the general order of magnitude of the problem is probably shown with a fair degree of accuracy by these figures. That they do not on the whole exaggerate the extent of enforced unemployment—as certain widely publicized claims would have it—is strongly suggested by the fact that nearly eight million persons put themselves down as able to work, wanting work, and totally unemployed or holding emergency public jobs when a voluntary registration of the unemployed was taken in November, 1937.²² However, we

21. A good summary of the data and methods used in constructing a number of the series commonly cited can be found in the *Social Security Bulletin* for June, 1939, pp. 79–84. See also the critical appraisal in Russell A. Nixon and Paul A. Samuelson, "Estimates of Unemployment in the United States," *Review of Economic Statistics* (August, 1940), pp. 101–111.

22. This was the survey conducted by John D. Biggers, the first actual nationwide census of unemployment after 1930. A partial enumerative test made in combination with the voluntary registration indicated that the true total was perhaps just under 11 millions, but in any case 7.8 millions took the trouble to report their joblessness through the mail. (*U. S. Census of Partial Employment, Unemployment, and Occupations. Final Report on Total and Partial Unemployment, 1937.* 4 vols.) Of course it is true that the loss of a job by the family breadwinner often causes other members of the household to look for work who are "additional" in the sense that they would otherwise not come into the labor market at all. But this does not justify the conclusion that involuntary unemployment is "really" less ex-

shall shortly have more information on this important question when the 1940 census returns are published.²³

As the assistant commissioner of the Works Projects Administration points out, if to the number of unemployed as currently or recently estimated is added the number of their dependents, the resulting total of some twenty-five million persons equals or exceeds the population of all the New England States with New York and New Jersey added, or the number of inhabitants of our ten largest cities, or the entire population of the United States in 1850.²⁴

It may at first glance seem difficult to understand how unemployment can have risen so much in a decade, when output has certainly not fallen off correspondingly. In

tensive than it seems. For it is probable that, if society were committed to providing job opportunity for all those able and wanting to work, however numerous, certain fresh supplies of labor not apparent at present would shortly be uncovered. These points will be considered further in chap. ii.

23. Preliminary census figures released in January, 1941, show 5,110,000 seeking work but without any form of employment in the last week of March, 1940, and 2,380,000 working for W.P.A., N.Y.A., or C.C.C.—a total of 7.5 millions (Department of Commerce, Bureau of the Census, Series P-4, No. 1, 16th Census of the U. S.) But it is officially pointed out that census enumerators classified incorrectly a substantial number of public emergency workers; for the aggregate number employed on federal emergency programs at approximately the time of the census, as reported by the agencies themselves, was 3,377,701 (or 2,905,919 without counting the N.Y.A. Student Work Program). This factor suggests a revised census total of 8 to 8.5 millions. As this book goes to press the discrepancy between such a figure and the estimates cited above has not been finally explained. In considerable part it appears to derive from differences in the calculated size of the labor force—52.8 millions in the preliminary census release, which excludes seasonal workers, etc, who may have been neither working nor seeking work the week the census was taken, as against 53.9 millions in the corresponding A.F. of L. estimate, based on the broader 1930 definition of "gainful workers."

24. Corrington Gill, *Wasted Manpower* (W. W. Norton & Co., Inc., 1939), pp. 14-15.

June, 1929, the Federal Reserve Board's monthly index of industrial production reached a high of 125,²⁵ and the unemployed, according to the American Federation of Labor, numbered 1.4 millions. In December, 1939, industrial production momentarily regained and passed its former peak, touching 128,²⁶ and the A.F. of L. estimated unemployment at 9.2 millions—approximately 8 millions more than before. How can this be explained?

The answer is that our working population has been growing at a rate of half a million a year (more or less, depending on the method of calculation),²⁶ while at the same time technological improvements have been expanding the average output per man hour of employment. Were it not for the decline that has taken place in the length of the working week, the divergence between output and unemployment figures would have been even more marked.²⁷

25. Index numbers from the old series (1923-25 average = 100). The new revised series (1935-39 average = 100), published in the August, 1940, *Federal Reserve Bulletin*, reduces the June, 1929, index of industrial production to 114, as against 126 for December, 1939, and thus makes the intervening rise in unemployment appear even more striking. (Indexes adjusted for seasonal variation)

26. As a result unemployment bears down with particular severity on the nation's youth, many of whom have never had jobs at all. Recent official estimates are lacking, but the 1937 enumerative check census referred to above suggests that there were in November of that year over 3.9 million unemployed persons aged fifteen to twenty-four inclusive (counting half-a-million emergency workers on federal programs), and it is generally believed that the number of young persons not in school or college and unable to find work rose considerably thereafter.

27. According to the Bureau of Labor Statistics, average hours worked per week in manufacturing fell from 45.7 in 1929 to 37.6 in 1939, and in manufacturing, mining, and steam railroads combined they fell from 45.2 to 37.8; *Monthly Labor Review* (September, 1940), p. 520. The same source estimates that in manufacturing the number of wage earners declined 8.7 per cent in this period, total man hours declined 24.8 per cent, and output per man hour rose 32.3 per cent (percentages calculated from *ibid.*). Corresponding figures for some fifty-nine industries studied by the

In an analysis prepared for the National Resources Committee Report on Technological Trends and their Social Implications,²⁸ it was calculated that, assuming the 1935 rate of productivity, a return to the 1929 level of *employment* would have required by 1937 an output of goods and services roughly 10 per cent greater than was forthcoming in 1929, while a return to the 1929 level of *unemployment* would have required an output some 20 per cent greater than in 1929. More recently the *American Federationist* stated:²⁹

In June, 1939, our standing army of jobless men and women numbers 8,500,000 more than in 1929. This is due to an increase of 5,400,000 in our working population and a decrease of 3,100,000 in the jobs available for them. With such an increase in job seekers, industry will have to rise substantially above 1929 levels if all are to have work. In the last 10 years, more boys and girls have reached working age than ever before in our history, and more than we shall ever have again; for our birth rate was at a peak eighteen years ago. Instead of creating more work for these job seekers, our producing industries in the first half of 1939 have averaged 20 per cent below 1929. This decline is chiefly responsible for the 3,100,000 who have not been able to get back to work on private industry payrolls. True, there have also been large increases in workers' producing power, but these have been adjusted in part at least by declines in the average work week from 49 to 40 or 44 hours.

National Research Project, as presented to the Temporary National Economic Committee by Corrington Gill, were minus 9.5 per cent, minus 29.4 per cent, and plus 30.6 per cent (cited from *The NESPA Guide*, published by the National Economic and Social Planning Association [May 15, 1940], pp. 18-19).

28. David Weintraub, *Unemployment and Increasing Productivity*: National Research Project on Reemployment Opportunities and Recent Changes in Industrial Techniques (2d impress., July, 1937), pp. 31, 53. Employment and unemployment are here measured in full-time man years.

29. August, 1939, p. 850.

Much the same appraisal, although with some differences of detail, is given by the Congress of Industrial Organizations. For example, in the first number of its monthly survey, *The Economic Outlook*,⁸⁰ we read:

Two things have happened in the period since 1929. The first is that the total number of workers available for employment has risen by 6.5 million. The second is the unemployment of not less than a million and a half, due to replacement of men by machines and changed methods, or technological changes. . . . In order to counteract these two factors, about 8 million more workers would have to be put to work in private industry if unemployment is to drop to the 1929 level of less than 2 million.

The outbreak and progress of the European war have suggested to many persons that our unemployment problem was about to solve itself. At the present time, while the notion that war trade with the belligerent nations would suffice as a solution is seen to have been mistaken, it appears to be rather widely thought that the task of organizing our national defense will put the unemployed back to work.

Of course this may turn out to be correct, since the millions not directly or indirectly reemployed as the result of a boom in the manufacture of armaments may ultimately be enlisted with the nation's armed forces or with auxiliary organizations. In view of the uncertainty of events, however, it is best to receive such predictions with caution. In the final analysis, moreover, even if the possibility be granted that these prophecies may be substantially borne out in the months ahead, the aftermath remains very much to be reckoned with. There are those who go so far as to say that the aftermath of the present period of herculean prep-

arations and contests lies many years or even decades ahead. But that is even less to be taken for granted than that unemployment will disappear temporarily.

All things considered, it seems more than probable that mass unemployment will still or again be with us in the near future, bearing down on our society with oppressive weight until we work out the means for solving this problem permanently—for all conditions and constellations of international affairs.

Contents of This Book

A FURTHER word about this book. What follows is not a *program* for ending unemployment. It is, rather, an attempt to set down the *conditions under which unemployment would not exist*, and thus to lay necessary groundwork for a full-employment program. The program itself is for many to ponder and discuss, and ultimately it must rest on the will of the majority of American citizens.

As already suggested, probably the most general formulation of alternative economic mechanisms is in terms of planned production on the one hand and production for market on the other. At the farther extreme lies overall production planning (the technique developed in the five-year plans of the Soviet Union), and from there we can imagine a gradation back into the more familiar supply-and-demand type of economy commonly spoken of as a market system, until finally at the other limit the elements of centrally planned activity are reduced to a minimum. It is proposed to examine the conditions for full employment in such a way as to cover the whole range of possibility between these extremes.

The argument, in brief, is this. If it is agreeable to oper-

ate all production under a master plan, permanent full employment can be achieved by the simple strategy of always carrying out as large a production program as the existing state of technology will permit the existing labor supply to handle. If, on the other hand, it is desired to submit only certain specified kinds of production to direct planning, preserving the rest of the economic system as the province of production for market, then assured maintenance of full employment requires that some means be found for controlling, not industries or producing units (except as specified), but the volume of production for market as a whole. In other words, while public works and the like must be available as a secondary defense against unemployment, and must be used for offsetting temporary fluctuations, society must not be subject (as it has been subject hitherto) to the dilemma of either abandoning the objective of full employment or else expanding various forms of planned production to an indefinite extent and in so doing involuntarily altering the character of the economic system.

Contrary to classical economic theory, prices cannot be expected to be flexible enough to stabilize the volume of production for market as a whole. Hence the necessary regulator must be found in the monetary circulation. Furthermore, notwithstanding imperfect coördination between the capital-goods industries and the production of consumer goods, as well as technological progress associated with monopolistic practices, and certain other highly significant factors, the most important single aspect of the monetary circulation is the anticipated overall size of the ultimate consumer market, i.e., the total volume or rate of consumer spending. For the main framework within which production for market functions, and gives employment, is

provided by the expected size of the dollar demand for final products, taken in conjunction with the expense (net expense) of hiring labor. Hence the first requirement for a full-employment market economy is that government underwrite or guarantee in advance the annual amount of consumer spending. To speak somewhat less accurately for the sake of brevity and convenience, the first requirement is national income insurance. How large the guaranteed aggregate consumer expenditure should be from year to year will depend on whether it is desired to have the general price level rise, remain more or less steady, or fall. Moreover the solution must obviously take into account such things as the extent of government orders (as opposed to individual consumer spending), foreign investment, and consumer credit.

To be certain of fulfilling its guarantee with respect to consumer spending as well as to be in a position to use supplementary stabilization techniques when necessary (strategic subsidies and tax reductions, public works expansion, etc.), government must be able to borrow or tax idle money, or, as a third alternative, to issue new money. In other words, it is definitely required that the monetary-fiscal apparatus, including that part of it concerned with international payments, be under social control and be operated in the general interest. Preferably, the discretionary powers of the monetary authorities will be sharply curtailed. Whenever, for example, the requisite consumer money income fails to materialize through the usual channels, so that government must make a net contribution, it is obviously essential that Congress shall have specified the manner in which such extra income is to be distributed.

Evidently such a program may limit or even abolish the privilege to hoard money, as distinct from the right to save

and to invest or lend savings at interest. Practically speaking there are reasons why it will probably also operate to hold the rate of interest at low levels, thus tending to cut into *rentier* incomes as such. There are in addition compelling practical reasons why such a program needs to be accompanied by a campaign against the price exactions and output restrictions of monopolies.

In comparison with other measures for maintaining production and employment, the underwriting of aggregate consumer spending is calculated to involve a minimum of direct government intervention and of discrimination as between different producers. The field for competition is kept open, the novelty lying in the fact that this field is not permitted to be too small, or to shrink and expand irrationally, but is made to be (what the classical economists supposed it would be automatically) stable and adequate in size. Significantly, this device for keeping consumer spending from being too small to support a full load of economic activity is at the same time a device for preventing excessive spending and, consequently, price inflation.

The analysis designed to show all this is offered with due apologies—to the economist for incompleteness of exposition and to the general reader for passages that will inevitably seem dull. But if the value of making such an attempt be questioned, let it be considered whether there is anything more likely to encourage people to go after something they want than the demonstration that there is nothing inherently unattainable about it.

Part One

Point of Departure

Chapter I

Full Employment

FULL employment, as the term is used in this book, is a state of affairs in which there is technically no *involuntary* unemployment—which is the same as saying that there is literally no unemployment not properly spoken of as voluntary, except for a normal amount of what may broadly be called *frictional* unemployment. There may of course be unemployables, so reckoned on the basis of objective (medical) test, not counted as part of the labor supply at all. If anyone chooses to call special attention to the exceptions by translating “full employment” into “optimum volume of employment,” no harm will be done. But an expression like that is cumbersome, as well as perhaps more rather than less confusing,¹ and it seems preferable to stick to the shorter term.

Involuntary Unemployment

THE critical concept is evidently involuntary unemployment, in its technical usage. To clear the way for defining this, let us first consider *voluntary* unemployment, and let

1. The next chapter will point out that a real “optimum allocation” of employment or human energy presupposes, among other things, an optimum distribution of income. Similarly, in strict accuracy the term “optimum volume of employment” should be reserved for a condition of full employment under circumstances in which there is reason to believe that the existing distribution of income corresponds to the best possible distribution, for only then can the ratio of leisure to work—which varies somewhat with income distribution—really be considered the ideal ratio.

us notice that any voluntary limitation of their working time by those who are self-employed or employed by others is really included. Since forced labor is the negation of freedom, we may safely suppose that in any satisfactory system the individual will have the right not only to select his line of work but also, in principle, to decide how much to work or whether to work at all. When it comes to these last two questions, it cannot be denied that economic necessity as well as convention and the like will be apt to play the main part in the choices actually reached. So far as immediate prospects go, it may even be that an ethical question will be felt to be involved, with a large majority considering that every able person should do some kind of work. But here too the final decision, with its consequences, will always presumably depend on the will of the individual. Let us see what this means in reality.

So far as final limits are concerned, the available quantity of labor in man hours per month or per year is a multiple of the number of persons capable of working (the whole population, less those incapacitated in one way or another as by extreme youth, extreme age, permanent unemployability, or temporary sickness or injury) and the number of hours that it is physically possible for them to work. This quantity is of no practical significance, of course, since custom, contract, legal enactment, and failure to classify unpaid work of housewives as "labor" reduce the available labor far below the theoretical maximum, and individual preferences for leisure cut into the remainder—these deductions giving us, finally, the supply of labor with which the demand for labor is to be compared.

That is, the actual labor supply, so called, will depend in part on the technical necessities of mechanized, coöperative production—the machinery and general organization

of productive processes imposing a certain rhythm, which in turn will ordinarily be adjusted and made the subject of collective-bargaining agreements. In part, again, it will depend on the established customs as to education, retirement, and vacations, and the prevailing social attitudes toward work, as against idleness, generally. (Which means that a society that becomes highly efficient at satisfying its wants may enormously expand in one way or another its voluntary leisure.) And in part it will depend on individual preferences for leisure under the given conditions with respect to the individual's wealth and income—that is to say, under the rules governing income distribution in the current period and the relevant period of the past.

One point to be taken up later should be noted here. Inasmuch as the amount of voluntary withholding of available labor is to some extent dependent on the way in which, *under the prevailing conditions of income distribution*, the individual balances his desire for (more) leisure against his desire for (more) money income, the supply of labor at any given time will tend to vary if income distribution varies, and cannot therefore be treated in theory as a fixed quantity. But, as will be seen in the next chapter, the practical importance of this for the issues under discussion here is negligible.

Let us turn now to the question of frictional unemployment, by which it is convenient to mean every kind of purely temporary, transitional, or “between jobs” idleness that is neither voluntary nor due to the incapacitating factors, sickness and accident.

When theorists wish to picture a society without any unemployment whatsoever, they commonly talk about a “static” system—an abstraction that is admittedly unrealistic but has certain uses as a tool of analysis. Strictly speak-

ing, that is not necessary; a "dynamic" system might also in theory eliminate frictional idleness (along with involuntary unemployment proper) by immediately "making" work as soon as a job disappeared or a new applicant for work arrived anywhere on the scene. In practice, however, it is a safe generalization that some frictional unemployment is everywhere bound to exist, at least until no industry is subject any more to changes of fortune, and seasonal influences no longer affect the pattern of demand in the labor market, and the last labor-saving device has been invented.

It is clear that, in the ordinary use of words, most frictional unemployment will be involuntary—that is, not chosen deliberately. The special feature about involuntary unemployment in the technical sense, therefore, is not to be detected by examining a particular case of unemployment at a given instant, but rather by examining what happens to a particular case of unemployment over an interval of time, or else, alternatively, by watching the system as a whole for changes in the amount by which the demand for labor falls short of the supply of labor. A case of frictional unemployment will, as the name suggests, be reabsorbed into production (or a first job will be provided, if it is a question of a young worker or an immigrant) after the "normal" period of time required for the system to overcome its friction. If workers who are looking for jobs are not, on the average, employed after a "normal" period, this will necessarily be reflected statistically by a rise in the total number actually unemployed. Thus frictional influences will always cause a "normal" number to be unemployed, and, so long as total unemployment rises no higher than this, a state of "full" employment will exist. But a

rise in total unemployment above this figure will indicate the existence of involuntary unemployment proper.

Other things being equal, it is evident that the "normal" volume of (frictional) unemployment will tend to be larger in an economy in which production methods are changing rapidly than in a relatively stationary economy. It will also tend to be larger if there is considerable "imperfection" on the supply side of the labor market than if labor is relatively mobile functionally and geographically.

In the last analysis, however, these so-to-speak objective factors are not decisive. In the last analysis the quantity of unemployment that society accepts as normal will depend on society's subjective attitude toward the phenomenon of unemployment. This is true because public works of one kind or another can be used to provide a temporary job for the individual who finds himself "between" two regular jobs. Indeed, as was suggested a moment ago, this policy might in theory at least be elaborated to the point where every person losing a job today would be given new work tomorrow. On the other hand, one may be prepared to find that certain employers of labor who share the general opinion that *fluctuations* in unemployment ought to be eliminated will be in favor of policies designed to perpetuate a *large normal* volume of unemployment, in order to keep the upper hand in the process of bargaining over wages.

We may conclude that in practice a certain amount of frictional unemployment will be accepted as inevitable, the word "inevitable" being simply a convenient shorthand for "not worth eliminating." Inasmuch as this book certainly does not take the point of view of any minority, full employment will herein imply a condition in which only

a small amount of frictional unemployment is to be found—the actual quantity, however, being determined by democratic processes. No doubt a verdict democratically arrived at on this question would be that it is “worth” eliminating, not all unemployment, but all except that “irreducible minimum” whose removal would very obviously be more costly from a social standpoint than a slight delay in fitting the disemployed into new work. In the short run such a minimum will be constant, except for seasonal variation, but over the course of time it may in fact be reduced further by forethought and various technical devices, especially because the development of job-placement and job-retraining facilities in this country still lies largely in the future. (Similarly, idleness through incapacity may be gradually cut down by measures that reduce the accident rate and improve the standard of health—as well as by the mere passage of time, since after long years of mass unemployment we start with a tragic legacy, though probably not a large one, of men and women demoralized to the point of being permanently unemployable.)

This brings us, then, to the definition of involuntary unemployment. It is clear from what has just been said that a rise in the unemployment index above the accepted or official normal for frictional unemployment (this index to be compiled, say, by the U. S. Employment Service) will indicate the existence of involuntary unemployment in the technical sense. Involuntary unemployment, therefore, is a condition in which those who are looking for work at prevailing wages, etc., are not able to find it promptly—i.e., within a period no longer on the average than the period of delay that is admitted to be reasonable. A possible qualification should be added to take care of the contingency in which the proportions of the various factors of production

are such that the marginal physical productivity of labor may decline slightly as the total quantity of labor rises. If we make this allowance, involuntary unemployment may be said to be a condition in which workers are unable in a reasonable time to find jobs that they would willingly take on real terms (real wages, hours, conditions of work) reduced from the existing standard by no more than the decline, if any, in the marginal physical productivity of labor corresponding to a slightly greater volume of employment. But, in general, the shorter statement should be perfectly adequate.²

2. According to Joan Robinson, “. . . it seems most satisfactory simply to say that the amount of involuntary unemployment is the amount of work which, in existing conditions, the population is willing but unable to perform” (*Essays in the Theory of Employment* [London, Macmillan & Co., Ltd, 1937], p. 11). This presumably corresponds to the definition above. According to Keynes (*The General Theory*, p. 15), “Men are involuntarily unemployed if, in the event of a small rise in the price of wage-goods relatively to the money-wage, both the aggregate supply of labour willing to work for the current money-wage and the aggregate demand for it at that wage would be greater than the existing volume of employment.” This too seems interchangeable with the above, except that it would not necessarily cover the case, mentioned by Mrs. Robinson (*op. cit.*, p. 172 n.), in which a fall in real wages increases the amount of labor looking for employment.

On the other hand such definitions as that given by another English economist, J. E. Meade, who holds that unemployment will have been brought down to its normal frictional level “when it has been just sufficiently reduced for money wage-rates to start rising at the same rate as the marginal product of labour” (*An Introduction to Economic Analysis and Policy* [Oxford University Press, 1936], p. 77), tie up the unemployment problem with the problem of wage determination in a way that creates theoretical confusion and might in practice result in a large volume of unemployment being rated as normal. What needs to be said at this point about the relation of wage rates to labor productivity is merely that, when unemployability is decided by independent test of the individual's physical condition, it is possible that in a market economy the marginal productivity of employable labor of some kinds may show itself to be less than what society regards as a suitable minimum wage, in which case the difference will have to be made up somehow through taxation and subsidy.

Thus full employment will mean in these pages simply a condition in which those who want to work at prevailing wages, etc., can always do so, making allowance for reasonable delays in finding work such as add up, for the system as a whole, into a total amount of frictional unemployment rated as normal. To repeat, in distinguishing between frictional and involuntary unemployment, it is not at all a question of how the unemployment arises. It is a question of whether or not, having become unemployed, persons who are looking for work can find it without undue delay.¹

From what has been said up to this point it must be clear that the analysis we need will not be primarily concerned with how the competition that takes place in a system of production for market may be divided as between "monopolistic" and "pure" competition, even though that question is of great social importance for several reasons, as will be pointed out in due course. The categories of ordinary value theory are useful for the study of the individual production concern and for the study of group equilibrium; to begin with, the growth of monopoly elements in the economic system tends to cause restrictions of output, and hence to eliminate jobs or prevent new jobs from opening up, in various business concerns, whereas it is generally agreed that a business engaged in pure price competition will not follow a restrictive policy.² But we cannot

3. It was recently suggested that even under conditions of pure competition and static demand and supply there may in special circumstances, such as perhaps apply to certain farm products, be a tendency for prices and production (and consequently employment) to fluctuate indefinitely or actually to diverge further and further from equilibrium. See, for example, Mordecai Ezekiel, "The Cobweb Theorem," *Quarterly Journal of Economics* (February, 1938), also Norman S. Buchanan, "A Reconsideration of the Cobweb Theorem," *Journal of Political Economy* (February, 1939), for an indication that this theory will probably not stand close analysis. The reason for mentioning it here is simply that, if it should turn out that

get from these categories the light we need on the problem of the volume of employment in the economic system as a whole.

The same consideration applies to technological progress. Technological disemployment obviously occurs all the time. When it does, workers often lose their occupations as well as their jobs and, even with the help of new training, may fail to recover their former earning power. The individual hardships resulting from this process should be mitigated by the industries in question or by society as a whole. But such disemployment need not embarrass an economy in which reemployment occurs at the same rate, or at a rate sufficiently greater to take care of a growing labor supply. We must look specifically to the quantitative principles governing the action of the system as a whole.

The Interpretation of Unemployment Statistics

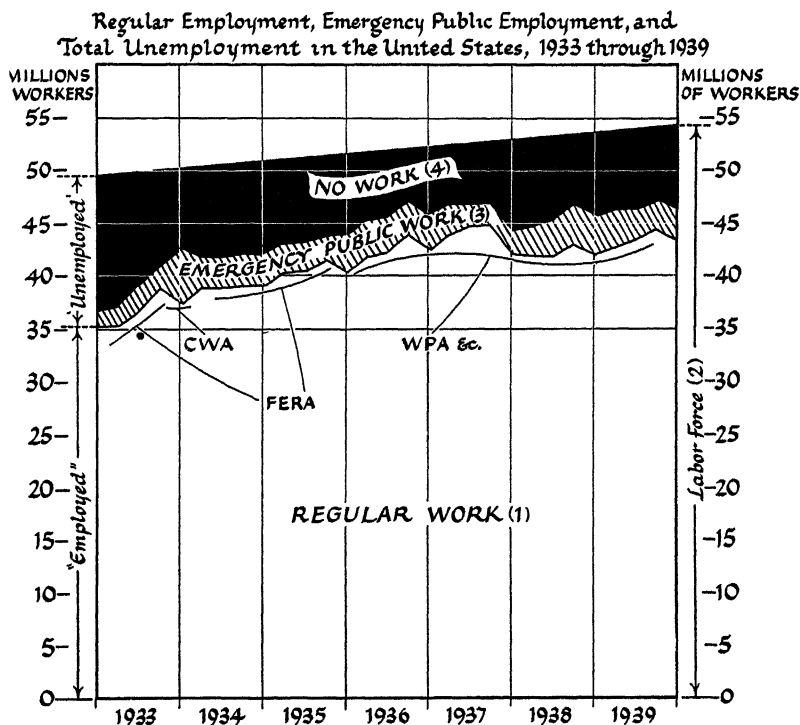
In interpreting current unemployment statistics, it must be borne in mind that they do not at best give us precisely the volume of involuntary unemployment as here defined, since at present no series is constructed upon this definition. On the one hand, the estimates cited in the introductory chapter fail to take adequate account of part-time employment; necessarily so, considering that satisfactory quantitative data are not available. In that respect, therefore, they understate the actual problem, since an economic system that keeps two workers on half-time when they want full-time jobs falls as far short of providing adequate employment as a system that keeps one worker wholly idle. On the other hand, certain other factors work in the opposite cases of this kind do in fact exist, this again would be quite indecisive so far as *total* unemployment is concerned.

direction, tending to inflate current estimates. For one thing, it appears that several hundred thousand workers who would be described herein as voluntarily idle or as temporarily out of the labor market altogether have been included in some of the published series. More important, the number of persons unable to obtain work of any kind has presumably not been as large as the number shown in any of the standard estimates, since government has given emergency work to a considerable proportion of those lacking regular jobs, as the accompanying chart will serve to indicate. It should be noted that, contrary to the practice prevailing in certain foreign countries, unemployment in the United States has hitherto been calculated without deducting emergency jobs of one kind or another supplied by government.

If the emergency employment provided by government yielded prevailing earnings, it would be proper to say that the jobs in question should be simply deducted in computing the extent of unemployment. Actually a hybrid situation exists, since those on W.P.A. rolls, in C.C.C. camps, etc., are neither wholly unemployed on the one hand nor able to find work at prevailing rates of pay, etc., on the other.⁴

4. Generally speaking, emergency public employment has paid the worker less—often of course much less—than corresponding work in regular private and public jobs in the same locality, even where prevailing hourly rates have been required (e.g., W.P.A. during certain periods), limitation of the hours worked per week or per month has kept total earnings at a comparatively low level. Much of the employment provided by the Civil Works Administration during the first three months of its brief existence (November, 1933, to February, 1934), and the construction jobs financed by the Public Works Administration, constitute exceptions to this generalization. It also is true—and indicates the ultimate interrelation between the problem of eliminating involuntary unemployment and the problem of securing adequate basic wage standards in private employment—that the minimum work-relief wages stipulated under various programs have tended to *exceed* prevailing private rates in those parts of the country where private rates have been especially depressed, notably in rural areas in the south.

Thus for a number of reasons it is clear that the amount of involuntary unemployment in the United States, ac-



Source: (1) and (2) from American Federation of Labor estimates of number employed and gainful workers respectively, 1933 and 1934 slightly adjusted to secure comparability with current revised series dating back to January 1935. (3) derived without regard to minor omissions, duplications, etc. by adding figures for Civil Works Administration, Works Projects Administration, Civilian Conservation Corps, and works projects of the National Youth Administration, as shown in the *Social Security Bulletin* for February 1940; work relief of the Federal Emergency Relief Administration, from the F.E.R.A.'s "Statistical Summary of Emergency Relief Activities, January 1933 through December 1935" (issued in 1937), and Public Works Administration, from a table supplied by the Bureau of Labor Statistics. (4) represents the remainder obtained by subtracting (1) and (3) from (2). All figures plotted are for the months of January, April, July, and October.

cording to the meaning attached to the term in this book, cannot be *precisely* stated today. Two changes in particular are needed before information on this point can be considered approximately accurate and procedure adapted to the needs of a full-employment policy. In the first place, all who are out of work and looking for work should be registered with some central agency, presumably the U. S. Employment Service. In the second place, the present ambiguous status of the emergency government job should be rectified by the payment of prevailing hourly and weekly wages on all public work.

At the same time, there can be no justification whatever for the contention that our current unemployment statistics, just because they do not represent the volume of involuntary unemployment with perfect exactness, are therefore to be taken lightly. No view could be more mistaken. As noted, the shortcomings of these statistics are of such a nature that in part at least the errors cancel out, leaving us with the previously stated conclusion that at any rate the general order of magnitude of the unemployment problem as it now exists in this country is probably shown with a fair degree of accuracy by these figures.

Full Employment versus "Optimum Allocation"

To achieve its maximum efficiency an economic system would have to satisfy the two requirements of full employment and "optimum allocation" of effort. On the one hand, then, no one would be deprived of the opportunity to work; on the other hand, no work would be wasted by being applied less effectively or productively than might

have been the case. In the Introduction attention was called to the fundamental importance of keeping the distinction between these two aspects of the public interest clear when it comes to formulating economic foreign policy. The next chapter will dig down toward the roots of the allocation problem in general. There are, however, two special matters of definition, in both of which it is a question of avoiding confusion between the issues of full employment and optimum allocation of effort, which deserve brief notice here before we go any further.

As the term, employment, is used in this book, it refers to human employment solely. Attention is called to this because economists frequently speak of the full employment of labor and other production factors as a single problem. Naturally it is important, while eliminating unemployment of labor, at the same time to keep the existing capital plant busy and to make use of (but not use wastefully) society's natural resources. However, it seems preferable—both methodologically and because of society's paramount concern with the tragedy, waste, and danger to social stability inherent in involuntary human idleness—to make the division of subject matter that is here indicated. From this point of view, therefore, unemployment of land and capital equipment, insofar as abolition of human unemployment does not automatically cause these phenomena to disappear at the same time, are not aspects of the employment question proper, but rather aspects of the question of how effort is allocated. Thus the problem of permanent excess plant capacity, which appears to be inherent in monopolistic competition,⁵ must be considered as a part

5. Monopolistic competition is discussed below, pp. 73-75. For a full treatment, however, the reader is referred elsewhere—e.g., to Edward Chamberlin, *The Theory of Monopolistic Competition* (Harvard University Press, 1933).

of the problem of achieving efficiency in the disposal of the working force. This is a reasonable way of viewing the matter. If excessive plant is built and maintained, that means that some labor is being applied unproductively, and it is pertinent to ask, from the standpoint of allocation of effort in the broadest sense, whether this waste can be avoided without incurring greater wastes of some other kind. If there is idle land in spite of full employment of labor, the same question arises.

The other matter relates to the concept of "disguised unemployment," a term sometimes used to indicate a shift of workers to "inferior" occupations.⁶ In former times, when land was free or could be bought for a few dollars an acre, a worker who lost his job in an industrial center often had and sometimes took advantage of the chance to go out into the country and take up subsistence farming, possibly returning to the mill later on when times improved. This ready access to the soil was of fundamental importance. Or he might devise some other form of self-employment, such as doing odd jobs for those more prosperous than himself. These possibilities concealed or disguised the extent of the disemployment that periodically occurred. An unemployment census, had it been taken, would not have correctly pictured the impact of the downward fluctuations in industrial activity. The same thing is true today, to a lesser extent. No doubt one of the ultimate forms of self-employment appeared under President Hoover: apple selling. But a shopkeeper wiped out tomorrow by a decline in purchasing power might contrive to buy a few acres and make some sort of a living. Or a factory hand whose job disappeared might have relatives in

6. See Joan Robinson, "Disguised Unemployment," *The Economic Journal*, June, 1936.

the country who would offer him board and lodging, or better, in exchange for his work. In addition, there are unquestionably, outside the range of our unemployment statistics, many persons brought up on the land who would leave the farm communities in which their services are no longer at all essential and would appear as job seekers elsewhere if job opportunities only existed.

Like idleness that is specifically the idleness of capital equipment or natural resources, however, "disguised unemployment" will herein be disregarded; that is to say, it will be considered an infringement of optimum allocation of effort and not an infringement of full employment. If self-employment, etc., were considered the equivalent of unemployment, confusion between the two problems might be invited from the outset. Actually, so far as concerns a genuine full-employment economy, no important consideration is involved. Although the phenomenon has been important historically, in times of depression, including the depression of the 'thirties, few would ever prefer a travesty on a job to real employment. Hence we may safely say that, in a system that succeeded in establishing real employment opportunity for all, "disguised unemployment" would be nonexistent.

Chapter II

“Allocation”—The Secondary Problem

FOR the moment let us turn back to the point that maximum efficiency in an economic system would require not only full employment but also the most effective use, or in other words an optimum allocation, of the effort put in. For it is worth our while to deal with this second requirement sufficiently to show the practical primacy of the first.

Since unemployment and wrong allocation both operate to reduce efficiency, it is of course impossible, if we are considering economic systems without reference to time or place, to maintain that one is any more wasteful (in the broadest meaning of the word) than the other. Is it more economical to have a little more employment but a little less satisfactory allocation of energy, or a little less employment but a slightly better utilization of it?—Such abstract questions obviously admit of no answer. However, since we are concerned with actuality, comparative statements are in order. In certain situations—for example, in countries that had already achieved full employment in the process of producing “guns” and might turn from that to the production of “butter”—it could be argued, on the theory that a general shrinkage in activity would not in any case be permitted, that the paramount issue was allocation. But it would seem difficult for anyone acquainted with actual conditions in the United States today to doubt that as a nation we are losing more from unemployment

than from errors in the way we use the energies that are employed.

This is certainly not to say that our allocation of effort is satisfactory. On various counts, particularly on the count of a certain distortion arising from the restrictive policies of monopolies and partial monopolies, unevenly distributed throughout our production system, it is widely believed that our energies are in part misdirected at present. There is unquestionably a good deal to be said in support of this view. Still, except for glaring inequalities in wealth—themselves partly traceable to monopoly—which make it possible for production to respond to the lightest whim of a millionaire while disregarding the urgent needs of a family living on starvation wages, it is not immediately apparent that our present system, grossly inefficient as it is in giving employment, is grossly inefficient also in its allocation of energy.

This in itself is sufficient reason why the American people should make their main attack directly against unemployment. But a further reason for the same conclusion, and an eminently realistic one, appears when we compare full employment and optimum allocation from the standpoint of the relative precision or measurability of the concepts in question—a standpoint from which it is usually possible to tell whether the approach to various goals is likely to involve more lost motion or less. It is the thesis of this chapter that full employment is by all odds the simpler and more definite concept of the two, subject to much the smaller amount of disagreement so far as its practical identification is concerned.

Inasmuch as the average person will doubtless grant this contention offhand, and since in any case the subse-

quent argument does not depend on such comparisons, the reader may if he chooses skip this discussion and begin again with Chapter III.

However, the subject has a certain philosophical or at any rate methodological importance that should make it of interest to economists. After all, it is only a few years since Keynes¹ attacked the whole established system of theory according to which the real world is held to be essentially like that imaginary, Ricardian world wherein general underemployment cannot occur except as the result of temporary mistakes or deviations from equilibrium. The entire body of economic discussion, indeed, is permeated with the notion that the problem of economy—the problem, that is, of the proper allocation or disposal of scarce resources—is *the* economic problem. If it can be sufficiently emphasized, not only that the allocation problem is not *the* economic problem in any practical sense today, but also that its solution is a far less simple and obvious matter than an overhasty or overnarrow examination of it has often led economists to assume, some progress will have been made toward a better balance in economic thinking.

The Complex Character of “Optimum Allocation”

It has already been pointed out that full employment is not a determinate quantity in any absolute sense—that is, it does not depend merely on the size of the available working force. In the first place, let us recall that we must presuppose agreement about a “normal” or admitted quota of

1. In *The General Theory*.

frictional unemployment—which in practice could hardly be zero. In addition, we have seen that full employment obviously does not exclude voluntary leisure, which, whether we are measuring its volume in man hours or in total abstentions from work, must *partly* depend in a free society on the way in which society's income is shared, since the individual's income position will affect his valuation of leisure time. These qualifications should not be overlooked. Nevertheless, they are unimportant when ranged alongside the difficulties that arise when we set out to define optimum allocation of effort.

It is elementary common sense to attempt to allocate effort in an optimum way—to get the most that can be got out of a given expenditure of effort—in short, to practise true economy. Naturally it goes without saying that this condition of perfection could never be more than very roughly approximated, so far as society as a whole is concerned, no matter how production might be organized. What is pertinent here, however, is not the fact that in the nature of things the ideal could never be fully realized, but rather the fact that, as a social ideal, optimum allocation has *no meaning* at all other than the very broadest meaning it can be given.

This is readily apparent as soon as we stop to ask ourselves a simple question. What—let us inquire—is the best result that society can hope to get from a given expenditure of effort? Evidently the best possible result is the greatest income or return in the form of *satisfactions* that that effort can be made to yield. To be sure, this immediately raises another question to which there is no easy answer, namely, the question as to how the total of satisfactions in society is to be measured. But at any rate we are reminded of the crucial fact that, from the point of view of society, it

must be a mistake to make a fetish of some particular aspect of the problem of economical allocation and overlook the larger objective. Certainly no hypothetical optimum is of any significance whatever—as an optimum—if some major hypothesis upon which it rests is contrary to fact. The problem invites, not a partial solution, but a solution that takes all the relevant factors into account.

The overriding consideration, if we are really concerned with optimum allocation, is the fact that waste in the utilization of energy is a hydra-headed monster. (Indeed, it may sometimes assume the guise of a monster that grows a second and perhaps more ferocious head just when and because the first has been cut off.) Let us keep this firmly in mind as we proceed.

Economists have stressed the fact that it is a mistake to make a fetish of the technological aspect of efficiency. The best equipment should always be used—if there is going to be enough demand for the product to cover the total cost, cost of equipment included. But the proviso is fundamental. In many situations a machine that is technically efficient is uneconomical; its bigness and modernity are a positive handicap in the context in which it is placed; the effort diverted to it should have been applied to something else. Speaking more generally—efficiency must not be viewed simply from the standpoint of the alternative ways in which a particular good or service might be produced, but also from the standpoint of the alternative goods and services that might be produced with the resources in question. The requirement is that a particular cost should always be incurred when the resulting return promises to be greater than this cost, and never when it promises to be less. From the consistent application of this principle will tend to result a condition in which a given further amount

of cost would be equally productive, in no matter what part of the economic system it might be applied, that is, a condition of equimarginal returns.

The Question of Income Distribution

WE have here a somewhat elaborate truism, important because it can serve as a useful guide to policy—if we know, to begin with, what society's costs and returns really are. The proviso is again absolutely fundamental. Economists who beg this question, saying by way of explanation that it is impossible to weigh the satisfactions of one individual against those of another individual (and hence impossible to get back to society's ultimate sacrifices and gains), have the right, of course, to equilibrate mythical social costs and returns to their hearts' content. But they have no right to ask to be taken seriously when it comes to judging public policies in the light of the criterion of optimum allocation, i.e., the criterion of the maximum satisfaction obtainable from a given expenditure of effort. For, no matter how refined their tools of analysis, they simply have no materials upon which to put these tools to work.

This becomes apparent when we consider the problem involved in comparing costs, and returns, and costs with returns in a monetary economy like our own—an economy in which the monetary unit provides a universal foot rule, so that it is convenient for most purposes to treat costs as synonymous with money expenses and to reckon returns as synonymous with the sums of money that consumers are willing to pay. In these circumstances it is to be presumed, at least as a first approximation, that an act of production is worth while if the resulting money receipts equal or exceed the money expenses. (In specific cases the interpreta-

tion of this rule may often involve some difficulty, but the rule itself is clear.) However—and here is the crux of the matter—both the money receipts and the money expenses of the different production enterprises will vary with variations in the way in which society's income is shared.

For the moment let us concentrate on the more obvious and more important dependent variable, the producer's money receipts. A redistribution of income is bound to produce changes in the scale of consumer preferences—that is to say, changes in the relative valuations attached to different products by consumers who are thinking of acquiring them. For example, a redistribution in favor of the poor will increase the demand for articles of general consumption and reduce the demand for expensive luxuries. No one doubts this. But it leads us at once to the conclusion that each different income distribution must have a separate "ideal output" peculiar to it. Consequently either the concept of optimum allocation is totally unconvincing, because there are seen to be innumerable alternative optima, or grounds must be advanced for holding that a more satisfactory income distribution can be distinguished from a less satisfactory one, so that then there really is a unique optimum allocation toward which the system might tend.

This is the dilemma confronting those economists who wish to take refuge from controversy by avoiding the thorny problem of income distribution. They are free to say if they like that there is no known way of comparing with scientific precision the satisfactions of different individuals, and on this basis it is proper for them to disclaim the possibility of making any statement at all as to whether or not a dollar will yield more satisfaction when spent by a poor man than when spent by a rich man. They will then be bound to assume that any given preference scale is as

good as any other would be. The only trouble with this is that there is no very clear reason why anyone (except, perhaps, a theoretical economist, or someone with a strong practical bias in favor of the particular income distribution of the moment) should be interested in the perfectly hypothetical optimum that emerges from a discussion of this kind. Such an optimum is purely formal. It bears no close relation at all to the general welfare. It can apparently co-exist with a state of affairs in which a substantial minority—or, for that matter, the majority—is fed, housed, and clothed on a scale below minimum standards of health and decency.

One might take a somewhat different position and maintain that, inasmuch as the existing income distribution is the resultant of the forces of supply and demand operating in the past, which have yielded incomes only in return for services rendered, there is necessarily a rightness about the existing distribution that makes it the only proper basis for evaluating costs and returns. This view has an imposing tradition behind it. Indeed the literature of economics—especially the older literature, in which the economist, far from talking in a vacuum of any kind, was very definitely giving practical advice in the real world—has repeatedly stated or implied this belief.² But the forthrightness of the

2. The theory of the modern equilibrium economists, including notably the followers of Walras and Pareto of the Lausanne school, takes the given income distribution as a datum and is not concerned with justifying or attacking this distribution. In large part, however, economics has been concerned to exhort or justify. The early classical writers, while by no means so convinced of the harmony of interests as were the later "optimists" like Bastiat in France and Carey in America, and while admitting qualms in particular regarding the propriety of the landlord's rent, maintained that generally speaking property incomes were traceable to savings out of personally created product, or to abstinence (Senior's theory of interest); and in any event they asserted that distribution was subject to irrevocable natu-

commentators here in question has not made their pronouncements any more generally acceptable in the long run. The basic concept suffers from being a little too audacious. After all, if any existing state of effective demand is automatically right simply because it exists, no one could have any reason to complain of the state of demand established by the most absolute and antisocial of dictators.

Thus there appears to be no rational escape from the necessity of setting up general principles whereby to distinguish between less and more satisfactory income distributions. The question is: what principles?

The writer wishes to pose rather than answer this question. The main concern of the present book lies elsewhere, and immediate purposes are served if it is demonstrated that the optimum allocation is indeterminate until some way is found of deciding upon the most satisfactory income distribution.

However, mention may be made of the most obvious of the materials that will need to be combined in some fashion whenever a serious attempt is made to reach such a decision.

On the one hand, we have the well-known proposition that to any given person at any given time the marginal utility of his income tends to vary inversely with the size of that income; for example, a dollar counts for more if

ral laws. The marginal approach, which came to dominate orthodox economic thought in the last quarter of the nineteenth century, was called on to supply fresh scientific ammunition for the view that all economic rewards are apportioned in accordance with contributions to society's joint product; see e.g., J. B. Clark in this country. Extreme statements on the subject are seldom found in the writings of the leading exponents of neo-classical theory (Marshall and the Cambridge school, etc.), but numerous disciples and amateurs continue to talk and write as if the existing income were demonstrably the only proper one, and occasionally a leading economist (e.g., Carl Snyder) still expresses much the same point of view.

his annual income is \$1,000 than if it is \$10,000. This, when combined with the fact that we possess no clearly established basis on which to distinguish quantitatively between one person's need, or capacity for satisfaction, and that of the next person, raises an initial presumption in favor of equality of incomes.

On the other hand, the necessity of preserving adequate incentives to effort operates, contrariwise, to suggest that some inequality is essential.

Thirdly, no solution will be a real solution unless it is acceptable to those who hold political power. This means, provided we place a high valuation on democracy, that the best solution must harmonize with the sentiment of the majority.'

Before leaving the subject, let us be clear that income distribution affects the meaning of optimum allocation somewhat more seriously than it affects the meaning of full employment. Stress has been laid on its immediate and striking relation to optimum allocation by way of its influence upon the relative demand for different products, and hence upon the money receipts of different production enterprises. At the same time it also bears on optimum allocation by way of its secondary effect on relative costs or money expenses of different kinds of enterprise, since considerable changes up or down in the scale of operation of different branches of production, corresponding to changes in the general pattern of demand, could hardly be assimilated without variations in certain unit costs of production one way or the other. So far as the statistical meaning of full employment is concerned, on the other hand, the net influence of changes in income distribution does not seem likely to be very great. Here some care is necessary in order to avoid confusion of thought. Today, with so many

families living at or but little above the subsistence line, the supply of labor tends to be linked up inversely with the demand, and hence with the size of the smallest family incomes—which in turn provides at least a partial measure of income inequality. Depression, that is, obliges many of the relatives of unemployed workers to enter the labor market looking for jobs they otherwise would not need or want. In this way some controversy arises as to the “real” extent of unemployment. By contrast, although it seems a safe prediction that the opening up of job opportunities as a matter of principle to all job seekers would itself ultimately cause a marked rise in the number of persons wanting to work (since work is a means of achieving personal independence), it may be ventured that, with job opportunity not in doubt, the supply of labor would be relatively stable so far as concerns the effect of any probable change in income distribution thereafter.

This conclusion is suggested in part because the question whether the individual will be in the market for work depends on other factors besides financial necessity. Such social considerations as education policy, retirement policy, and public opinion are certainly likely to play a very prominent part in deciding this question. Again, hourly standards and vacation rules covering entire industries are likely to be more decisive so far as concerns the hours of work put in than a strict, individual balancing of the marginal utilities of goods and leisure at the given level of individual income. The same conclusion, that probable changes in income distribution would hardly alter the amount of voluntary unemployment very greatly, is also suggested because the changed financial necessities of different individuals would have a tendency to offset one another. Greater equality of incomes, for example, might be expected to add

some new workers who had formerly lived comfortably enough in idleness, and at the same time to reduce somewhat the number of applicants for jobs from poorer families.

In addition to these repercussions in both directions on voluntary unemployment, as well as on the amount of time voluntarily put in by those working, and hence on the amount of employment constituting full employment, a change in relative incomes might incidentally affect to some extent the relative labor supply in different lines of activity—greater equality reducing somewhat, let us suppose, the supply of unskilled labor, while adding to the number engaged in office work and the professions. But that, insofar as it was the case, would merely be a further way in which optimum allocation would be affected.

Other Aspects of "Optimum Allocation"

THE question of income distribution receives the largest share of attention in this chapter because of its basic importance for any theory of maximum welfare. But the problem of finding the best formula for the utilization of scarce resources in society has a number of other striking aspects.

One of the most significant of these has to do with what may broadly be called the overhead costs of any particular economic system. This is of notable importance in connection with planned production. It is often said that a system of planned production necessarily requires a far larger and more top-heavy bureaucratic apparatus to administer it than does a more decentralized market economy. If this can be demonstrated conclusively, then it will have to be admitted that, so far as concerns this factor considered in isolation, the former type of arrangement is certainly

wasteful in a direct and plainly visible sense and probably responsible for insidious, indirect waste in addition. For in the first place, then, extra effort will always be allocated in such an economy to the function of merely keeping the wheels of production moving; that is, an extra number of administrative functionaries will always be needed. And—perhaps more important still—the wheels may move less steadily and well even so, the administrators also dragging down society's return per unit of effort expended by causing the individual production management to lose initiative.

With this should be bracketed the question of the general attitude of the whole population toward its work. The production system is not a mechanism creating simply a quantity of goods and services for society's use. Rather it is a mechanism creating a joint product—in the first place goods and services, and in the second place, the less tangible satisfactions or dissatisfactions resulting from real freedom of choice of occupations, or the lack of it, and from the process of work itself. There may be no physical unit available for measuring rewards and sacrifices of the latter kind—that is to say in the short run, before the output of goods and services itself is unmistakably affected by abundance or lack of trained talent and by the spirit of enthusiasm or apathy prevailing generally. Yet it is obvious that, if any system denies opportunity to part of the population, or any set of worker-manager relationships makes work meaningless and distasteful by causing the worker to become a scarcely animate cog in a vast machine whose operation he cannot at all control, then the economy that thwarts individual development or causes those relationships to appear as a by-product can never approximate optimum allocation of effort. (In the long run it may even

fail to maintain the population.) Stating this idea differently—the “methods” as well as the “results” (physical output) of production need to be suited to the demand. On this score, since it is sometimes charged that production for market develops a fundamental cleavage between workers and managers that can be avoided under production planning, the burden of proof, or disproof, is perhaps on those who speak for the former way of doing things.

Thus far only indirect reference has been made to the fact that the manner in which effort is allocated at a given time has subsequent as well as immediate effects. But that of course is one of the most crucial considerations. Conservation of the nation’s natural resources is fundamental. It is of the highest importance that economic arrangements be so conceived as to encourage invention and improvement, so that society’s real income may rise as rapidly as possible over the course of the years. And the fact that saving or capital formation as a physical process affects the distribution of this real income through time, diminishing present returns (if full employment exists to begin with) in order to expand returns later on, makes it necessary in the interest of maximization of satisfactions, assuming again a high valuation for democratic procedure, that the general public control the rate of social saving as well as the kinds of final output produced.

Common sense suggests, incidentally, that we should guard against taking an academically narrow view of how control by the general public can best be made effective. That would be to confuse ends and means. For example, it may in general be best to use the familiar procedure wherein the consumer “votes” with his money income, by disposing of the latter exactly as he personally sees fit. Nevertheless, it will not follow that popular “sovereignty”

over production can in every case be registered effectively by means of individual price offers, as opposed to collective decision; i.e., this will not even follow in all those cases in which it seems preferable to retain the element of personal selection to the extent of having the final payment for goods or services made by individual consumers rather than out of tax revenues. In certain respects the individual is not able to look after his own satisfactions (or, as some may prefer to put it, his own welfare). In others, there are striking differences between social and private returns or between social and private costs, and, if the general welfare is not to be sacrificed, the composite will must take precedence over the individual will.

It seems useful and in accordance with all our traditions to suppose that the individual is the best judge of his own needs, *except* where the contrary can be demonstrated. But the market place, of course, only permits the individual to choose from among the goods and services that are actually being produced. In other words, the market procedure is subject to a certain fundamental difficulty transcending the question of incorrect—in the sense of unprofitable—anticipations of market demand, such as are often bound to occur.³ Once resources have been allocated to production, alternative uses of those resources for that time period are forever excluded, so that no “control” (in the scientist’s sense) can exist to verify the ultimate suitability of that allocation. If money sufficient to cover costs is spent for the

3. And transcending, further, the possibility of multiple solutions to the equations expressing the working of a market economy. That is, it has been argued rather convincingly that there may be not merely one but several proportions among existing products each of which may be said to yield a maximum of satisfaction in relation to a *given* distribution of income. See, e.g., A. C. Pigou, *The Economics of Welfare* (4th ed., London, Macmillan & Co., Ltd., 1932), pp. 139–141.

resulting products, that does not demonstrate that even more might not have been spent for products that have not been offered.

The practical conclusion is that, in the case of some ordinary consumer needs, the results obtained when a larger group, or organized society itself, specifies what is wanted, and orders or plans the output collectively, are bound to conform more closely to consumer desires than the results obtained by the method of atomistic price offers distributed among the various products actually on the market. For instance, many if not most families are likely to be without adequate housing, medical service, and recreation facilities altogether if the problem of meeting these basic requirements is not tackled in coöperative or collective fashion. Furthermore, individual choice can be more of a burden than a privilege where the individual is primarily interested in standards of quality rather than in variety, lacks the information necessary to distinguish properly between alternative offerings (in some or all of which indeed poor quality may represent a deliberate production policy designed to bring a quick resale), and if unassisted by expert opinion or protective legislation falls prey to inaccurate advertising or the dictates of convention. This applies to food and drugs and to household appliances, for example, as disinterested investigators of quality standards in consumer goods have repeatedly demonstrated.

There is always, moreover, a social interest that not only limits individual freedom of action (as in matters of sanitation and public health generally) but also asserts certain positive claims to which the individual is bound to bow, claims designed to promote communal satisfactions of one kind or another (including national safety itself, which requires adequate measures of defense). This derived power

can also be abused—as can be, for that matter, the power to influence consumer demand by means of government propaganda—but that does not alter the fact that its exercise is essential in some spheres and may be found desirable in others.

As will be shown in Chapter VII, a good case can be made for having the rate of capital formation or social saving determined by conscious social action rather than “spontaneously.”

Certainly when it comes to specifying the amount of frictional unemployment to be regarded as normal there is no question but that the population through elected representatives should make the final decision, inasmuch as the costs of unemployment are unmistakably social costs rather than costs of individual enterprise. This consideration, taken together with the aforesaid limited effect upon the amount of voluntary unemployment to be expected from changes in income distribution, explains why full employment may for practical purposes be treated as a relatively simple and definite concept.

The various aspects of the optimum-allocation question selected for notice in this chapter are certainly all familiar enough. It will bear repeating, however, that the question itself is highly complex, because its elements not only add up but also interact with one another in subtle ways. It must constantly be borne in mind that, if we are really presuming to ask how the satisfaction derived from a given expenditure of effort can be maximized, it is essential to deal with the problem in its entirety.

But the optimum-allocation problem does not have to be solved as a prerequisite for solving the full-employment problem. On the contrary, full employment may involve any conceivable degree of efficiency or inefficiency in the

utilization of human energy. In abolishing unemployment, it is only reasonable at the same time to remove the most notorious distortions in allocation—those that arise from extreme inequalities of income in general and those connected with specific deficits in such essentials as housing. But, for the rest, society might as well regard allocation as a perennial problem. Not so with full employment, the conditions for which can be established once and for all.

Let us now consider the nature of these conditions. At this point we take leave of preliminary discussion and approach the heart of the full-employment problem.

Part Two

The Alternative Approaches

Chapter III

Planned Production and Production for Market

IF we want to know what determines the total amount of employment in a given economic system, we must ask ourselves first of all how the scale of employment of the individual concern or production unit¹ is decided. The activity of the system as a whole is of course the sum of the activities of its constituent parts. We must therefore understand the principles on which the constituent parts come into existence and operate, if we are to deal satisfactorily with their operation in the aggregate.

Experience shows that, in the modern world, technological progress makes the volume of production an unreliable index of the volume of employment *over extended periods of time*. Figures cited in the introductory chapter provide a partial estimate of the extent to which the latter has fallen behind the former over the last decade, and later on attention will be given to considering the way in which this particular factor of technological progress conditions the policies capable of assuring permanent full employment. On the other hand, *at any given point in time* it is

1. As is customary in economic discussion, "production" will herein be used in its broadest sense—thus including, for example, transportation and all kinds of miscellaneous services. According to the National Resources Committee there were between 10 and 12 million producing units in the United States in 1937 (farms alone numbering close to 7 million, and government incidentally accounting for nearly 20,000 units), some 90 per cent of the total number employing only one to five persons; *Structure of the American Economy*, Pt. I, p. 99.

evident that the amount of employment does depend on the amount of production; that is to say, expanded production involves greater employment—although not necessarily in proportion—and workers are laid off when production contracts. Let us therefore for the present simplify the problem of exposition by concentrating on the way in which the scale of *production* of the individual unit may be determined.

A considerable number of different procedures might be distinguished. In the United States today a manufacturer is likely to set his own selling price and then produce the output that demand will take at that price. Here the selling price, which is intended to recover costs of production, costs of selling, and a normal profit or better, is established in the first place with more or less direct reference to the prices charged by other businessmen in the same and related markets—the largest producers of a commodity often exercising price leadership, although outright price-fixing agreements are legally hazardous and doubtless rather rare. Or a group of producers may act in concert—sometimes on an international scale—to fix the volume of the output to be marketed. In that case demand comes into play by settling the price at which this predetermined output can be sold. Basic raw materials are particularly liable to this treatment, an instance being provided by the farm-output restriction schemes under the A.A.A. More generally, a farmer, considering that the price of his crops is beyond his control, can be expected to produce as much as he is able without incurring obviously disproportionate costs—or, in the case of a regulated crop, exceeding his marketable quota. A retailer may be committed to maintaining some or all of his sales prices a specified amount above listed wholesale or factory prices, with local consumer de-

mand, very largely influenced by brand-name advertising, determining the character and volume of sales. A public utility will fix its rates under the surveillance of a federal or state regulatory commission, and provide service sufficient to satisfy the demand at the rates thus established. A public construction job will be planned and executed on the basis of the supposed need for or desirability of the bridge, parkway, airport, or other project in question. And so on.

Alternative Principles of Output Determination

BUT in spite of the real dissimilarities in procedure that come into view when we survey the whole field of production, it is advantageous, from the standpoint of the present inquiry, to set up a relatively simple scheme of classification. In fact it is convenient to say that the scale of output of the individual economic unit always has been and always must be in future determined in accordance with one or the other of *two* principles—in the first place, the principle of production for market, and alternatively, the principle of production planning. Since these terms have no absolutely fixed usage, it must be explained what they signify in this book.² The distinction involved provides a useful

2. The writer anticipates that some “planners” will quarrel with his definitions (given in the following pages) on the ground that the distinction drawn is not calculated to emphasize sufficiently the merits of planning. If this anticipation proves correct, he must ask their indulgence. He feels sure that planning is necessary, whether it be production planning or planning of the monetary circulation—or both together, in due proportion. But little is gained by using words vaguely. Is planning intended to have decisive influence? Then it must carry with it effective control over the thing planned. (This is not to disparage the advantages of having experts draw up plans and act in a purely advisory capacity. But, after all, such procedure will not solve the major problem of production volume.) If

frame in which to develop the subsequent argument, even though it is neither necessary nor possible to deny that—as in most other schemes of classification also—certain actual cases appear to straddle the line of demarcation as drawn.

By production for market is meant the general principle under which a production unit proceeds when its scale of output is decided on the basis of a balancing of its own (anticipated) costs and (anticipated) returns at alternative possible levels of output. (The fact that a given production decision is characteristically made before money is either spent to carry it out or received in payment for the resulting product necessarily concentrates attention on anticipated rather than realized expenditures and revenues.)^a On the other hand, where the scale of output of a production unit depends on some sort of social balancing of costs

planning is to involve effective control, what is the thing to be directly planned and controlled? Is this thing production itself? If so, the writer believes "production planning" or "planned production" is the best descriptive term available. If not, then it seems advisable to say that the tradition of production for market is being upheld

3. Since the future is unknown, the businessman tries to obtain guidance from past experience so far as possible, and doubtless at times is unduly slow to recognize changes looming ahead. But that his scale of operations is not dependent on profits or losses already realized, except as these are also believed to provide a reliable index of profits or losses in the future, is obvious to common sense and at least roughly verifiable from the statistical record. For example, the Reserve Board's adjusted index of iron and steel production fell precipitately from 142 in August, 1937, to 46 in June, 1938, although steel profits were much higher in the spring and summer of 1937 than a year previously, when production ranged between 83 and 120. (According to the *Monthly Review of Credit and Business Conditions* of the Federal Reserve Bank of New York, issues of September and December, 1937, total net profits of 14 steel companies were 121.4 and 163.5 million dollars for the first six and first nine months of 1937 respectively, as against 37.8 and 61.9 millions for corresponding periods in 1936.) Industrial production generally, after a less striking rise in profits, fell from 117 in August, 1937, to 76 the following spring (according to the latest revised series, from 120 to 80).

and returns, or at any rate on a balancing of costs and returns from a point of view not dictated by the accounts of the production unit, or group of production units associated for marketing purposes, that will be taken as exemplifying the principle of production planning or planned production.

The most obvious case of production for market is the privately owned and operated concern whose output policy is determined solely by considerations of maximum profit, and the most obvious case of planned production is the governmental activity entirely supported from the general budget. But planned production does not necessarily exclude the defraying of costs of production by means of special fees (as where the owners of property fronting on a given street are assessed to pay for a new street pavement), or through sale to consumers or to other production units of the goods produced or services rendered (for example, water or electricity brought to a region expressly as a matter of public policy, or the use of the Holland Tunnel out of New York City). Nor does it necessarily involve government finance at all; for simplicity in discussing the means for maintaining full employment it seems best to concentrate upon activities where that is in fact the case, but it should be recognized that there are numerous instances of planned production supported by private donations, the activities of charitable organizations furnishing here the clearest examples. On the other hand, turning to production for market, this is not necessarily synonymous with production for profit, as we shall see in a moment.

The point to be emphasized is that the distinction here drawn rests on whether the reason for a given act of production derives from the production unit's own objectives in a financial or accounting sense or whether it derives

. . .

from elsewhere. If an economic unit produces a certain output *because* production on that scale is expected to satisfy the accounting requirements applying in that case (whether these be maximum profit, zero profit, or even some particular relationship between cost and sales price that necessarily results in loss), that will be regarded as production for market. If, by contrast, it produces this output "for use"—i.e., *because* the output itself or the act of producing it is believed to be inherently valuable (the output or the employment being simply "needed"), that will be considered planned production, even though the output may as it turns out pay for itself or conceivably yield a profit.

The N.R.A. experiment has often been called a partial blueprint for planning, under the aegis of business itself—as in some senses it was, particularly where the codes contained provisions for production control, such as restrictions on installation of new machinery or increase in plant capacity, limitations on hours of machine or plant operation, or allotment of production quotas. But from the standpoint adopted here production under these codes was production for market, not planned production. For since the quotas, etc., imposed limits, in the interest of profit, rather than requirements, in the interest of creating a particular quantity of products regarded as socially necessary, the planning may generally speaking be said to have referred to *nonproduction* rather than to production—a characteristic shared by many other less formal output restriction agreements among producers in various times and places.

There are undoubtedly real borderline cases—for example, postal service and certain publicly operated electric power and transportation systems—in which social policy dictates the original establishment or acquisition of the

plant or facilities as a whole but the volume of service rendered and hence the size of the variable cost incurred necessarily depend on the capacity of the market to absorb that service at rates presumed to be high enough to avoid a deficit. Probably these cases are best classed under planned production so long as, when rate policy is under discussion, the desirability of making the service generally available is viewed as being of greater importance than strictly financial considerations. But in any event it is of no significance for the present argument how such debatable situations may be viewed.

Since a narrower interpretation is often placed upon the term production for market than the one suggested above, it will pay us to examine this category more closely. Under production for market some particular level of output promises to be more suitable than any other, in the sense that prospective sales proceeds stand in such relation to prospective financial costs as to make that much production, but not a larger amount, desirable, and this then will be the actual level of output. But "desirable," in the present context, may have several different meanings. Under *laissez faire* it is practically always a maximization of profit that is sought. Nothing is more familiar than the fact that in the business world production will not take place at all unless it can be shown to pay (that is, to be likely to pay), and if production does take place it will not be pushed beyond the point at which, in prospect, it ceases to pay. However, while this may adequately cover most cases, in production for market as here defined the criterion to which appeal is had in deciding how much output is desirable may also be something other than maximum profit—either because the production managers do not want to maximize profit or because as a matter of public policy they

are prevented from doing so by the imposition of certain rules that act to limit the amount of profit possible.

Consider, in the first place, consumer coöperatives. It is a fixed principle of the increasingly important coöperative movement to avoid deficits but at the same time not to retain any profits, distributing them instead to purchasers in proportion to the value of goods and services bought. "If your books show a profit they're wrong."⁴ Yet at the same time it is clear that goods are produced and sold by coöperatives strictly in accordance with business or market principles. Indeed it is to this fact that coöperation owes much of the success and social power it has attained in northern Europe, a success and power that its adherents hope to see duplicated in this country.

The coöperative movement aside, the question whether or not production for market is geared to the wheel of maximum profit primarily depends on whether or not organized society sees fit to interfere by imposing some form of regulation, and this in turn largely turns on the presence or absence of competition in the industry in question.

Monopolistic Production

IN normal cases of pure competition (in most kinds of farming, for example), where the individual producer can safely assume that variations in his own scale of production will not affect the selling price prevailing in the market one way or the other, he may ordinarily be expected, of his own accord, in the process of seeking as much profit as possible, to produce up to the point where the cost of supplying additional units begins to exceed the given price.

4. Quoted from the magazine, *Consumers' Coöperation* (May, 1940), p. 69.

The buyer thus pays what the final unit costs to produce, so that neither too much nor too little effort is allocated to the branch of production in question, at least so far as the existing income distribution provides a standard of reference. Moreover, any unusual profit (traceable to excess of marginal—i.e., final unit—cost over average cost) soon tends to eliminate itself by bringing additional competitors into the field and thus lowering prices. Here if anywhere the classic arguments for *laissez faire* have application.

Where an element of monopoly enters into the competition, new problems arise.⁵ Here the individual producer's sales can be expanded only by a lowering of the price, and the calculations of a businessman aiming to maximize profit are complicated by the necessity of trying to allow correctly for this factor.⁶ Since an expansion of sales will necessitate a lowering of the price received for each unit produced and sold, the net addition to monetary receipts, i.e., "marginal revenue," will be reduced by the loss of part of the possible selling price on the "earlier" units, and therefore marginal revenue rather than a given price is the index watched by the producer in these circumstances. Advertising and other selling expenses introduce additional complications for the producer (as well as further problems for society), because they affect the demand as well as the costs, but they do not alter this general conclusion.

Thus, even though the original establishment of a monopoly or partial monopoly of large size may often make possible the introduction of cost-saving procedures and by

5. For a detailed account of the theoretical issues here briefly touched upon the reader is referred to Edward Chamberlin, *The Theory of Monopolistic Competition*.

6. In the graphs that economists use as a visual aid, the demand curve for his product is seen to have a downward slope, whereas under pure competition this curve is to all intents and purposes perfectly level.

reason of that fact may materially advance the efficiency of production, the day-to-day operation of the monopoly element in business enterprise nevertheless invites an uneconomic allocation of society's efforts, with the output of each monopolistic unit held below the level required for a maximization of satisfactions, relative to the existing structure of effective demand. For since production tends to stop at a point where marginal cost, equating with marginal revenue, is smaller than the selling price, the buyer pays more than the final unit costs to produce. Hence if factors of production could be transferred from some purely competitive field—where price and marginal cost are equal—to one of these monopolistic fields, there would be a gain all round. The reasoning here is difficult, but economists do not doubt this general conclusion. Suppose, for example, production and sales of beans were reduced by \$10,000, and production and sales of cement increased by the same amount. No buyers would be worse off than before, buyers having placed the same valuation on the cement as on the beans, while someone would necessarily be better off than before (assuming no unemployment difficulty), since because of the lower marginal cost of monopolistically produced cement certain factors of production would be left over to produce, say, something previously not produced at all. This would continue to be the case until expanded production of cement (and, to be strictly accurate, reduced production of beans) had closed the gap between its marginal cost and its selling price by raising the former or lowering the latter or both.

This principle applies to some extent to the extremely common and indeed very likely predominant phenomenon of "monopolistic competition," in which there may be many rival sellers but their products (various brands of

canned goods, cosmetics, clothes, etc.) are somewhat differentiated, or thought to be, or in which rival sellers (such as retail stores) render distinguishably different services in connection with supplying the same products. Naturally it also holds good in those other cases of imperfect competition where the sellers of a given uniform commodity are few in number (oligopoly or monopoly proper). In other words, it applies throughout the range of production where "administered" prices rather than freely competitive prices prevail. However, the cost of imposing regulations such as would force an expansion of output of the ordinary "monopolistically competitive" unit would be apt to outweigh the cost saving from the resulting elimination of excessive differentiation and excessively numerous rivals. It therefore seems probable that in any market economy these typical units, like those operating under pure competition, will continue with general approval to try to make as much profit, consistent with legitimate competitive practices, as they can. This profit will not be an abnormal amount for any long period of time, because the field can always be invaded by new enterprises.

But theory and practice agree in indicating that the same cannot be said for monopolies as monopolies are thought of by the average person. If a producer has true monopoly power, which enables him to exclude rivals from his field, he may in the absence of regulation make an adjustment of his scale of production yielding him abnormally large profits year in and year out. Evidently he will commonly quote a price rather than announce that he has a certain number of units to sell (although this practice may sometimes be reversed), so that in most instances it is strictly speaking price rather than volume that is fixed directly, and price exactions rather than volume restrictions that

figure in the popular outcry against monopoly. But in any event both tactics reach the same result. A monopolist may further find it to his advantage to adopt a price policy that discriminates between different classes of buyers of his product. That, however, is rather a refinement of the procedure just described than a departure from it.

When effective monopolies have arisen in fields where, by the very nature of the production situation, no success could attend the effort to restore intraindustry competition, society has taken steps to prevent the fleecing of the monopolies' customers by imposing systems of regulation, especially price regulation. Naturally, when a price is subject to external control, the regulating authority interferes to that extent with the monopoly enterprise's power to obtain a maximum profit. This happens, for example, in the case of electric light and power rates. Yet the output sold is still limited by the ability and willingness of users of current to meet the established charges, which are based on costs in a sense acceptable to the regulatory commission and the courts. In other words, it seems proper to say that the volume of service rendered by the electric utilities still depends, in spite of regulation (that is, in spite of interference with spontaneous efforts to maximize profit), on a market calculation. That is essentially the situation in the fields of transportation and communication as well.

What regulation has already accomplished, taken together with the shortcomings it has revealed, suggests a theoretical speculation that will emphasize the point under discussion. Circumstances might arise in which government would modify present procedure and adopt the rule that all monopoly enterprises—that is, all enterprises with certain standard characteristics causing them to be registered and known as monopolies—should produce up to the point

where marginal cost was equal to selling price. We are not here concerned with the mechanics by which such a rule might be administered, although attention may be called to the possibility that, by means of some scheme under which managerial remuneration was made to vary with output,⁷ the self-interest of business management might be linked to the effective realization of this principle designed to simulate in a most important respect the results characteristic of pure competition. A rule of this kind would shrink the monopolies' profits, since production of the "later" units would take place at a net sacrifice of revenue. Indeed to many of them—operating, in the existing state of demand for their services, under decreasing costs—it would inevitably bring overall losses, so that subsidies would have to be given to keep them solvent. But the point is that production under such a rule would necessitate a comparison of the individual economic unit's costs and returns at alternative levels of output, and therefore would still constitute production for market as herein defined.

This discussion has dealt cavalierly with the concept of financial cost. It must be admitted at once that here is a problem of measurement that presents both practical and theoretical difficulties, above all because of the fact that fixed equipment, etc., is expected to pay for itself over a period of time rather than immediately. All sorts of ways of treating fixed or supplementary costs, in contradistinction to variable or prime costs, are possible, and all sorts of accounting practice are in fact followed in reckoning just what financial cost it is that must be recovered from sales proceeds at any given time before "profit" begins to ap-

7. The scheme would also require standardized costing to clarify the meaning of marginal cost, thus serving to identify and prevent excessive expansion of output.

pear. Fortunately, however, these perplexities lie outside the range of the present discussion. Even if there is no uniformity about the way in which different businessmen reckon their costs, all of them in producing for the market do balance their prospective receipts against what they consider to be the relevant costs, and that is what concerns us in this place.

Production for Market Contrasted with *Laissez Faire*

To recapitulate—production for market is not defined herein in a way that makes it synonymous with production under conditions of *laissez faire*. While such a definition might be suitable for other purposes, in this discussion the line of demarcation between production for market and production planning is made to lie elsewhere, so as to distinguish cases in which the scale of output of the individual unit is decided as part of a larger plan from cases in which it is decided on the basis of a comparison of the unit's own costs and returns, either with or without reference to specifications imposed from outside. For example, the aforementioned rule calling for the equating of marginal cost with price would serve the purposes of society seeking a judicious allocation of its resources, rather than the purposes of the individual profit-making concern, but it would nevertheless make the decision as to scale of output depend on conditions of costs and returns specific to the concern in question. This scheme of classification seems to have definite functional value, since it separates procedure in which the responsibility for production decisions can be, and obviously will be, decentralized to the individual production

units from procedure in which the responsibility for these decisions is drawn into a central nexus.

It is possibly worth noting that, in theory, production decisions might be made centrally even in a system of production for market. The locus of responsibility for a judgment is not the same thing as the criterion on which the judgment is based. That is to say, it is not *logically* impossible for the cost-revenue comparisons governing the individual unit to be made by a central agency, equipped with demand and cost statistics, rather than by the unit's own management.⁸ As a practical matter, however, this possibility is not of much significance—except perhaps in the modified form to be considered in a moment. For it would evidently mean sacrificing the benefits of decentralized initiative, without gaining in return the simplification supposed to be associated with production planning. After all, the main social advantage on the side of production for market is exactly the fact that it permits the widest possible diffusion of responsibility for the necessary decisions as to what and how much is to be produced by the individual concern. This indeed—and not the alleged impossibility of allocating resources rationally in a system of production planning—is the heart of the argument for production for market.

But one point deserves to be emphasized. The distinc-

8. In recent years the argument about "market *socialism*" has sometimes touched on this point. Several prominent adverse critics of such a system have adopted the assumption that any attempt to give it a "rational calculus" to govern the allocation of its resources must involve this kind of procedure, and have stressed the fact that the solution of an almost infinite number of simultaneous equations by a governmental agency would be a physically overwhelming task. See F. A. von Hayek, in *Collectivist Economic Planning* (London, George Routledge & Sons, Ltd, 1935), p. 212; and Lionel Robbins, *The Great Depression* (London, Macmillan & Co, Ltd, 1934), p. 151.

tion drawn between production for market and production planning is not intended to set up barriers between them that are in any way artificial. These two procedures have hitherto certainly seemed somewhat remote from each other in practice, for the very good reason that they have expressed strikingly different philosophies about society held at different times and by different interest groups. It is perfectly possible that the dividing line between them will also remain clear in future. But on the other hand we should not lose sight of the fact that, at least in theory, the market principle and the planning principle ultimately converge upon each other.

Production planning expresses a deliberate choice as between or among all the various combinations of ways in which society's resources might be allocated and used in production. Certain economic activities are held to be worth while, others not. That is, certain kinds of production are considered to be worth the costs involved, and others to cost more than they are worth. Obviously, unless some mechanism is developed for comparing different costs, and different returns, and hence costs with returns, production planning can fulfill its own purposes only somewhat arbitrarily and roughly.

Hence it is possible to imagine a system of production planning in which the national plans would represent in large part merely a succession of consolidated statements giving publicity to production decisions arrived at, as it were, atomistically. That is, they would embody decisions arrived at, either by the various production managements separately, or by a central planning organization through a manipulation of the cost and returns probabilities applying to the many separate production units—a somewhat rough-and-ready approximation of the procedure alluded

to a moment ago. Thus the results given by production planning, as the latter was made subject to more and more precise analyses of costs over against returns, would begin to draw near to the results given by production for market, supposing the individual producer's market decisions to be based on a more and more accurate knowledge of what other producers were doing.

Carry this process of convergence far enough from either end, and we arrive at a place where the difference in the results obtained under one principle and under the other would represent just the difference between the costs (or the returns) of particular acts of production when viewed socially and when viewed privately.

It is in the social interest to do certain things that the individual enterprise would never find it worth while to do, and it is in the social interest to prohibit the doing of certain things that the individual might find commercially profitable. The same principle applies where it is not a simple question of doing something or leaving it undone altogether. On the one hand, we have familiar instances in which social costs are greater than the expenses actually borne by the enterprise that causes those costs to be incurred. A saloon will not necessarily have to pay for the extra police and, perhaps, alcoholic ward expense it occasions. The smoke from a factory causes damage to health and property, almost never charged as a cost to the company operating the factory. And so on; examples could readily be multiplied. On the other hand, a farmer who drains his land may confer a benefit on the land of his neighbor, or on the community generally, for which he personally receives no compensation to offset against the expense that he has incurred. Similarly, when a manufacturer sets up his business he may sometimes bring into

existence certain so-called external economies in producing or marketing that redound to the advantage of others in the locality besides himself.⁹

Even this difference between the results of production for market and production planning could in theory be obliterated. Under the planning principle, discrepancies between private and social costs (or, on the other hand, returns) are necessarily taken into account in some fashion or other—consciously or unconsciously. To attempt to evaluate them all accurately would be a hopeless, and in every sense uneconomical, undertaking. Assuming, however, that the discrepancies that appeared to be of practical consequence had been estimated approximately in terms of monetary value, it would become possible to take account of them and yet retain production for market. Some public agency, that is, would compute the monetary values of these discrepancies and assign them as additional costs or as cost reductions (i.e., as special taxes or special subsidies) to the particular production units concerned. Furthermore, this method is evidently one that society could use, and has used, for taxing some activities wholly out of existence and for newly creating others—although when an activity is supported altogether from the budget, it would be rather fantastic to describe that as subsidization under the market principle rather than as planned allocation of funds and resources.

The above may be restated in summary form. There is no logical reason why production planning may not be largely based upon, or adapted to, highly refined statistical evidence expressing the state of individual consumer

9. One of the best-known discussions of this problem of private *vs.* social net products is in Pigou, *Economics of Welfare*; see esp. Pt. II, chaps. ix–xi (4th ed.).

demand on the one hand and the opportunity costs of productive resources—i.e., their values if applied to alternative uses—on the other. (If it slavishly reflected the results that would be given by spontaneous atomistic action, however, a system of central planning would become a redundant mechanism.) The two principles can also interlock in the reverse manner; that is, central planning can where necessary contribute to the data, on the basis of which individual market decisions are taken, the necessary evaluations of differences between private and social costs, or private and social revenues.

Two Types of Economic System

So much for the principles of production for market and production planning as such. These two principles are not inevitably separate and distinct, as has been shown, but at the same time, as a practical matter and under present conditions, the difference is clear enough to warrant treating them as direct alternatives, at least for the individual unit of economic activity. Let us now proceed to examine the different ways in which economic units fit together to form aggregations of units, or economic systems.

Theoretically it might seem possible for an economic system to organize its activities all on the principle of production for market, or partly on this principle and partly on the principle of production planning, or all on a production-planning basis. In the abstract, those are the available alternatives.

However, a consistent or universal application of the market principle to production is not really conceivable. Public education and military defense, for example, fall in the category of planned production, as do governmental

activities generally, since the scale on which they are carried on is not as a rule determined by means of a balancing of the revenues and expenses immediately involved. Indeed, a government not directly planning any economic activities may be said to be a contradiction in terms. Of course it is always possible to maintain that, formally speaking, government itself steps into the place of the consumer or purchaser when it allocates any funds from the budget. The funds thus allocated then become the sales proceeds of the organizations or departments producing the legislation, defense, justice, etc., under consideration, and the organizations or departments in question go ahead up to the point where their costs are equal to these sales proceeds. But there is nothing to be gained by torturing language in this manner. It is far more straightforward and reasonable to say that every economy is bound to contain certain highly important elements of outright production planning.

The question then arises whether it is possible for a system to go all the way to the nonmarket extreme and operate entirely on the basis of production planning—"beginning with the number of hectares of wheat and down to the last button for a vest," as Trotsky put it in one of his attacks upon Stalin.¹⁰

This question is perhaps not quite so easy to answer. It does seem possible to conceive at least of having a system of universal production planning—a system in which the exchanged or marketed output of every separate farm, every little shop, and every service unit of whatever nature (some of these "units" consisting merely of single individuals) is decided as part of an overall production plan.

10. Leon Trotsky, *Soviet Economy in Danger* (Pioneer Publishers, February, 1933), pp. 29-30.

The Soviet Union has never gone this far. Perhaps the smaller economic units in a system could all be grouped into larger units, and the production plan be applied to the latter, leaving the former to adjust among themselves in their own way. However, it serves no useful purpose to speculate about the practical feasibility of a program to universalize the production-planning principle. Let us, rather, simply say that the limiting case would be a system of *virtually* complete production planning, thus remaining on the safe side by supposing that there will always be a fringe of production for market in any immediately foreseeable society.

Existing and possible economic systems may then be classified as follows. At one extreme is a system of virtually complete production planning. Practically speaking, that means a system with a coördinated master plan—a “central” or national plan—to avoid chaotic inconsistencies and conflicts among separately planned sectors of economic life. At the other extreme is a system of production for market in which the exceptional elements—elements of planned activity—are limited to the field of the primary functions of government, narrowly defined.

Evidently every intermediate point on the scale between these limits also represents a possibility, making it allowable to say that differences between systems are really differences in proportion rather than in kind. However, for the sake of simplicity the argument will again be developed in terms of two distinct alternatives. These will be: (1) a system of production planning—meaning either virtually complete or at least heavily predominant production planning; and (2) a market economy—meaning one characterized by large and probably predominant elements of pro-

duction for market, but also containing planned elements, and these not necessarily restricted to the irreducible minimum.

The reason for this somewhat asymmetrical formulation is a practical one. An overall production plan covering approximately the entire economy is a real possibility, in the sense that influential and perhaps numerically important sections of the population regard such an arrangement as the only solution for our present economic difficulties. On the other hand, a return to a correspondingly extreme or pure market system seems nowhere to be a practical possibility. The clock will not run backwards, no matter how much it may be importuned to do so. The contemporary economic world, as a critic has sadly remarked, is "just interventionist chaos."¹¹ Certainly a distinction should be drawn between interventionism as we know it today and positive planning. Indeed in a highly significant sense it is precisely the planlessness of most economic systems at present that invites or compels government intervention at so many different points. But one thing which is wholly obvious is that the planned activities of governments will never in the future be limited to that little group of functions traditionally recognized as legitimate by the *laissez faire* school.

The volume of direct production planning may be very considerable indeed, and it will still be realistic to speak of a market economy—just so long as the elements of production planning are specific activities that have been singled out for that kind of treatment rather than integral parts of an economic organization based on the philosophy of overall production planning. Since there is no fixed limit

11. Hayek, *op. cit.*, p. 24.

to the number of directly planned activities, it is possible to see how, by a gradual enlargement of their number, a market economy might little by little be transformed into an outright system of planned production. Perhaps the point where all mass-production activities had been subjected to direct planning, leaving only "nonessential," "scarcity" goods within the sphere of production for market, would be the point at which it would seem most natural to say that a market economy no longer existed. Again, a system of planned production might gradually be converted into a market economy.

It should now at once be possible to characterize in general terms those economic policies which will assure full employment.

In a system of production planning, the total volume of activity and employment will depend for practical purposes (neglecting as unimportant any fringe of production for market) simply on the scale of the planned production activities, or in other words on the size of the plan.

Thus the first type of economic policy that will assure full employment is a planned-production policy in which it is a cardinal principle of planning to make use of the whole labor supply. If, for example, the labor supply grows larger, or if technical progress makes it possible to produce the same output with fewer hands, the plan of production is adapted to the change and becomes that much more ambitious. This will be considered further in the next chapter.

In a market economy, the total volume of activity, and hence of employment, will depend on two factors—(a) the scale of those activities which are planned, which may be large or small in the aggregate, and (b) the anticipations

with regard to the market, i.e., the prospective relationships between individual costs and individual returns, prevailing in the sphere of production for market.

Thus the second type of economic policy that will assure full employment is a market-economy policy in which the elements of planned-production activity are always large enough to absorb that part of the labor supply not used in production for market, so that, however large or small these elements of planned production may be normally, they are automatically expanded if and as the employment given by production for market for any reason contracts, in relation to the labor supply. This type of policy will be the main topic of discussion beginning with Chapter V.

What has just been said is transparently simple, and does not carry us very far. Nevertheless it is essential to state elementary propositions, and to keep them constantly in mind—for what they do and for what they do not contain. For example, there is nothing about the above description of a full-employment market economy to suggest that the aggregate volume of the planned activities embedded in the economy will *necessarily* be large or subject to wide fluctuations. That evidently depends on the aggregate extent and relative stability of production for market.

On the one hand, it is possible to imagine a society with a rather small complement of directly planned activity, and with its market conditions so nicely adjusted (what this means we shall see later on) that the mechanism of expandible planned production might hardly ever be called into use. In short, flexible public works would be only a *secondary* line of defense against unemployment. On the other hand, a market economy might contain a large volume of directly planned production, and might lean heavily on a flexible public works program to combat unemploy-

ment—and still might fail to give any assurance of full employment. Perhaps this is the situation toward which the United States has been heading in recent years.

New Deal Policy and Traditional Republican Policy

WITHOUT anticipating unduly the argument of Chapter V, a word may be said at this point about two types of economic policy that will *not* assure full employment. Let us call them—as without too much distortion we may—the New Deal policy and the traditional Republican policy.

After eight years of the New Deal, we find ourselves in a peculiar dilemma. When government has curtailed its spending, production has slumped. Nevertheless, so far as it has been attempted, public spending has failed to reduce unemployment to any great extent. Certainly the public-spending program has not been pushed as boldly as it might have been. Certainly also the New Deal approach has had other shortcomings. However, there is no intention to add anything here to the debate on this wider subject, since our concern is with a more fundamental consideration. The really crucial point is that the prospects of the whole policy of public spending have *necessarily* been highly dubious from the beginning because there has not been any assurance that private spending would not react negatively to public spending, and because, as things work out at present, the reactions of private spending in the final analysis determine the aggregate volume of activity.

No elaborate analysis is needed to show that the net or total effects of any action may differ from the particular, partial effects under immediate observation. Suppose, for example, that government spends a billion dollars on a

public-investment program, thereby creating a considerable number of new jobs directly, and additional jobs indirectly in industries supplying construction materials. If the "confidence" of private enterprise is not adversely affected, then we may expect to see a further (secondary) increase in total employment as the result of the fact that part of the additional income money will be spent in consumer markets, stimulating expansion on the part of industries producing consumer goods and services. We have here the so-called multiplier phenomenon.¹² But suppose now that this public-investment program causes private-investment spending to be half a billion dollars smaller than it otherwise would have been. Worse still, suppose that it is so unfavorably received by private business that private investment contracts by a billion and a half. The multiplier will still be multiplying (i.e., theory is still intact), but the base that is being multiplied will no longer be a billion dollars. In the last-mentioned case the base, and therefore of course the product, will be a negative quantity.

This is not for a moment to disparage the humane view, characteristic of many New Deal pronouncements, that government should by one means or another provide work where and so long as private enterprise is unwilling or unable to do so. This philosophy has represented the New Deal at its best. One could take exception to it only if a hands-off policy promised greater employment results, which is not the case. But New Deal pronouncements on this score, and the actual measures enacted, have not been very effective in reducing the army of the jobless. The New Deal has needed some lucky accident to help it out, and that has only lately begun to materialize in the form of an international situation requiring a prompt expansion

12. See, e.g., Keynes, *The General Theory*, chap. x.

of the nation's defenses—which, needless to say, is a lucky accident in a very limited sense indeed.

The traditional Republican program has been, as everyone knows, a latter-day *laissez faire* program—hands off business, keep public expenditure down, balance the budget, and so forth. One would not expect that even a conservative party could maintain the letter of Adam Smith's epoch-making book unscathed in the modern world.¹³ From force of necessity concessions have been made at many points—just as Smith himself, writing in the year of our Declaration of Independence, was disposed to admit of exceptions where necessary. However, his main doctrine of noninterference by government, later formalized in the dogmatic pronouncements of the classical economists of the nineteenth century, is presumably still the chief totem in the Republican camp. To be sure this totem is sometimes put away out of sight inside the wigwag, and may be due for oblivion before very long. But down to date it remains an object of veneration.

For example, according to District Attorney Thomas E. Dewey, heading into election year:

There is a force in America that has been held in check which once released can give us the employment that we need. It has nothing to do with slick monetary schemes. It has nothing to do with slick economic panaceas. This force is the energy of American enterprise, great and small. Given a chance, it can produce employment, can generate new purchasing power and set in motion once more the surging flow of commercial venture.¹⁴

13. Adam Smith characterized a system of natural liberty as one in which the sovereign has only three duties to attend to. (1) the defense of the country, (2) the administration of justice, and (3) the maintenance of certain public works and public institutions that private enterprise would never find profitable. *The Wealth of Nations*, Bk. IV, chap. ix.

14. Speech delivered in Minneapolis, as quoted in the *New York Times*, December 7, 1939.

Similarly, Wendell L. Willkie said in November, 1939:

If we can restore the free flow of money into the capital markets, we shall make it possible for the unemployed to get off the streets and back to the factories. Our industrial plants have been starved for new capital for the last ten years. They need to spend billions of dollars for new buildings and new equipment. And these expenditures in turn will ultimately require the services of more than ten millions who now wait in the breadlines or mill about the streets looking for jobs. A little of that hard Dutch attitude of free enterprise should solve the question of unemployment, which is still the basic problem of our time.¹⁵

Proponents of *laissez faire* rest their case on the supposed self-adjusting qualities of a system of enterprise free from extensions of government interference. If their case were persuasive, it would give at least theoretical interest to the measures—that is to say, the abandonment of a whole body of directly meliorative legislation—necessary to carry it into effect. But they cannot demonstrate that their program assures full employment. Indeed, when they make this claim, they are refuted both by logic and by experience.

As regards logic, the Keynesian analysis (or any analysis along similar lines) easily demonstrates that the equilibrium position in an exchange economy will not necessarily be the full-employment position. The classical economists

15. Speech at the annual dinner of the Holland Society of New York; the *New York Times*, November 17, 1939. Again in Toledo Willkie "asserted that if governmental control could be taken off the nation's money markets there was enough idle capital ready to be loosed by business to remove eight or ten million persons from the unemployed lists"; (this according to the *New York Times* of March 5, 1940; the statement was not found in a text of the Toledo address subsequently supplied to the author by Mr. Willkie's office).

were wrong insofar as their theoretical structure rested on the contrary assumption.

This still leaves open the theoretical *possibility* of full-employment equilibrium in conditions of *laissez faire*. Here, therefore, one naturally appeals to the record. Since it is hard to imagine a government more benignly disposed toward private enterprise than the government of the United States under the administrations of Harding, Coolidge, and Hoover,¹⁶ the events of 1929-33 seem conclusive enough to satisfy any open-minded person that this theoretically conceivable outcome is not today a practical possibility of any importance. It is useless to say that events in the world beyond our borders precipitated our catastrophic depression. The allegation is of dubious merit in any case, but, even if it were true, it would not alter the fact that responsible statesmen must live and act in the world as it is.

Thus neither the New Deal nor the hands-off opposition—nor those inclined to seek a compromise between the two positions—can be said to have the answer to the unemployment problem. It is possible to be more specific. The con-

16. Benjamin M. Anderson, Jr., sees even this period as beset with governmental economic planning (tariffs of 1921-22 and 1930; Federal Reserve open-market purchasing in 1924, 1927, and 1930; interferences with the stock market by President Coolidge and Secretary Mellon, Federal Farm Board, attempts to prevent deflation of wages, prices, etc., after the stock-market crash) and holds that the main responsibility for the economic disorders of the period since 1929 rests with the aggravated "cultural lag" of government behind economic life displayed in these measures. (Address on "Governmental Economic Planning" delivered before the American Economic Association, published in the *American Economic Review*, Supplement, March, 1940, see pp. 254-256.) We have here the school of thought according to which the trouble with *laissez faire* is that it has never really been given a fair trial. The element of truth in this contention, however, is of an exceedingly abstract nature, the pure strain of *laissez faire* referred to in the argument having little in common with the policies advocated by any politically significant groups.

siderations cited above show us that, in the context in which it is carried on, most of the current argument pro and con about the merits of government spending is literally incapable of ever providing the answer to the unemployment problem.

Let it be understood that neither a policy like that of the New Deal nor a policy like the traditional Republican program is precluded from temporarily coinciding with a condition of full employment. War may bring full employment—at least to participating nations. Conceivably also the United States might achieve full employment momentarily through the sudden arrival of a series of important inventions, or through the capture of important foreign markets from other countries without war. It is even thinkable—although certainly the objective conditions can be seen to be much less favorable in this respect than they were in the nineteenth century—that by a succession of accidents the period of relatively full employment might be prolonged.

For our purposes here, however, the crucial point is this. While full employment is conceivable (although improbable) in conjunction with the policies heretofore advocated by one or the other party, there is no reason why unemployment would not reappear as soon as the special circumstances supplying the extra jobs ceased to be operative. In short, it is in any case impossible to claim that either set of policies *assures* full employment. This is decisive, so long as we are concerned with investigating the conditions that will give this assurance.

Chapter IV

Full Employment by Planned Production

AS was briefly noted in the last chapter, one type of arrangement assuring full employment is a scheme of planned production in which it is a cardinal principle of planning to make use of the whole labor supply.

Naturally, production planning as such does not automatically abolish unemployment. Society might draw up a plan that failed to contain enough production activities to provide work for all who wanted to work. In the first place, full employment might not be a cardinal principle of the plan. This is extremely unlikely; why should a plan that was democratically framed involve a voluntary choice of an involuntary condition, i.e., involuntary unemployment, or, on the other hand, why should a dictator make a plan permitting a part of the able-bodied population to subsist in idleness? In the second place, the full-employment principle might be thought of as fundamental and yet might conceivably break down in practice through hopeless bungling.

Yet practically speaking, aside from this last possibility, a system of planned production seems bound by its very nature to achieve and maintain full employment (irrespective of whether or not its employment is allocated as wisely as possible among different lines of activity). The proposition hardly calls for extended analysis. In such a system the scale of output of the individual production unit depends on a balancing of costs and returns from an inclusive or social point of view rather than from the point

of view of the production unit itself. From an inclusive or social point of view the cost of any unemployment in excess of the accepted normal for frictional unemployment is prohibitive, inasmuch as normal frictional unemployment is by definition the amount of idleness that those who frame the social decisions consider it just worth while to tolerate. Naturally the "fit" between the supply of labor and the demand for labor can be maintained continuously over a period of time only if appropriate adaptations are made to changes in the labor supply and the techniques used in production. But this merely means that the extensiveness of the plan, as well as its content, has to be revised from time to time to keep abreast of changing conditions.

General Procedure for Full Employment under Production Planning

ESSENTIALLY the problem of those who frame the overall plan is one of determining priorities in the importance of different possible production activities and of arranging to proceed with as many of these activities as can be handled, beginning with those that are regarded as necessities and continuing down the list to less and less essential activities until the whole of the voluntary labor supply is taken up. A substantially satisfactory output of food, housing, and clothing will naturally be arranged for first. Hospitals and medical service, schools and libraries, electric power, transportation, communications, national defense, public administration, recreation facilities, development of natural resources, scientific research—all the obvious items, both for current consumption and under the head of capital formation, will be included. After all of the basic necessities and

conventional comforts of living have been budgeted, the remainder of the labor supply will be allocated to the production of what are, relatively speaking, luxury items, these being either goods and services not included at all in the categories already provided for, or else better qualities of some of the goods and services in the latter.

As matters stand in the United States at present, if the demand for certain products becomes saturated, or if new labor-saving devices are invented, or if the working population expands, our difficulties seem to multiply. In a system of planned production, however, any one of these changes would constitute a gain and not a handicap, since it would present society with a choice between more goods and services on the one hand and more leisure on the other. One alternative, that is, would be to enlarge the aggregate planned output so as to have it include certain items that society previously had to forego, and the other alternative to shorten working hours so as to have the same planned output require more hands for its production. It follows that society would have every incentive to extend the use of mass-production methods.

The technocrats and others who have studied the gigantic powers of production provided by our recently developed engineering techniques, and the further possibilities latent in discoveries that seem to lie just ahead, undoubtedly have sound reasons for many of the claims they put forward. Hence, in spite of the fact that the expansion of leisure time itself gives a powerful impetus to the development of new wants, the interesting possibility arises that society's real or physical capacity to consume may in future fail to keep pace with society's capacity to produce, unless the working week is very drastically shortened indeed or a large proportion of the labor supply is diverted into the

production of individualized goods and services lying outside the reach of mass-production techniques. In this situation—if scarcity tends to disappear, except on the periphery of economic activity, so to speak—a society with a system of production planning would presumably use both methods at once for keeping capacity to produce and capacity to consume in line. Thus the individual would be more and more likely to devote his working time in the technical sense—the hours spent producing for the use of society in general—to the provision of goods or services not included within the mass-production range. And also, more and more of his activity would fall outside his working time, being concerned with directly promoting the satisfactions of his family, his friends, and himself. Art and higher education should flourish under these conditions.

Under planned production, questions of price are distinctly secondary, and incapable of affecting the level of output or employment. True, so long as scarcity remains a practical problem, the paraphernalia of a system of prices are bound to be involved in the production-planning procedure just as much as under production for market. But whereas the latter is associated with the kind of pricing system in which prices (cost and selling prices) characteristically govern output, production planning is associated with the kind of pricing system in which prices are used to keep score with respect to output but do not govern it in any immediate sense.

Thus temporarily there may be a greater output of certain things under the general plan than can be sold at prices high enough to cover the cost of producing them. Indeed this can hardly fail to occur to some extent. But the items in question do not need to be sold to cover cost. The price can be lowered, either in the consumer market proper

or in the market for intermediate products, to the point where the market is cleared. A critic might choose to describe such procedure as a modified form of rationing, and to charge it with being in conflict with the principle of optimum allocation—a claim entitled to respectful appraisal, with final judgment reserved until all the relevant considerations had been assembled. But this would not raise any question about unemployment.

The Soviet Union

RUSSIAN experience is of course of the greatest interest in connection with every aspect of production planning, since the Soviet Union, with its five-year plans, has provided by far the largest and most complete example of production planning of which there is any record. If the foregoing argument is correct, there should be no involuntary unemployment in the Soviet Union.

This appears to be the actual situation. The fact that a guarantee of jobs with pay is written into the Soviet Union's present constitution indicates that full employment is regarded as fundamental in principle.¹ That it has been secured in practice seems established by the best of the available information. Although no other country has de-

1. Article 118 of the Constitution of the Soviet Union, as adopted at the Extraordinary Eighth Congress of Soviets of the U. S. S. R. on December 5, 1936, reads as follows:

"Citizens of the U. S. S. R. have the right to work, i.e., the right to guaranteed employment and payment for their work in accordance with its quantity and quality.

"The right to work is ensured by the socialist organisation of national economy, the steady growth of the productive forces of Soviet society, the preclusion of the possibility of economic crises, and the abolition of unemployment." (Quoted from *Economic Survey*, Monthly Bulletin issued by the U. S. S. R. Chamber of Commerce, Moscow, February, 1937.)

veloped so extensive a system of social security, payment of unemployment benefits was discontinued at the end of 1930.² The 1930 *I.L.O. Year-Book* of the International Labor Office states that the number of registered unemployed was reduced from 1,616,200 in December, 1928—when the first five-year plan was just getting under way—to 240,000 in October, 1930, and subsequent issues of this series omit the U. S. S. R. from the unemployment tables. While critics are extremely cautious about accepting statistics emanating from the Soviet Union at their face value, this particular claim, that unemployment has been abolished, does not appear to have been brought into serious question.

Generally speaking, the main burden of adverse criticism on this point is, rather, to the effect that Russian planning has managed to eliminate unemployment *temporarily* by virtue of special conditions—by an inflationary policy, for example, or because a building boom is in progress, or because the Russians are so poor in everything that it is impossible for them to produce too much of anything. In similar circumstances, it is said, other systems would keep equally busy; by the same token, unemployment will recur later on in the U. S. S. R.³

2. See, e.g., Sidney and Beatrice Webb, *Soviet Communism: a New Civilisation?* (Charles Scribner's Sons, 1936), pp. 665 ff. For comment on the comprehensive character of social insurance in the U. S. S. R., see Maxwell S. Stewart, *Social Security*, W. W. Norton & Co., 1937.

3. See, e.g., T. E. Gregory, "An Economist Looks at Planning," *The Manchester School*, Vol. IV, No. I (1933), p. 9; Jahangir Coyaji, "Some Economic Problems of Socialism," *The Mysore Economic Journal* (March, 1938), pp. 74-75; Leonard E. Hubbard, *Soviet Trade and Distribution* (London, Macmillan & Co., Ltd., 1938), p. 346.

Certain critics also maintain that the system has produced an excessively high labor turnover, and on the other hand that large numbers of persons in disfavor for political reasons are subject to forced labor under miserable

Of course, if the Russian system were to collapse entirely, then unemployment would reappear. At first, perhaps, its recurrence would take the partially concealed form of a rise in frictional unemployment to a level well above the amount that had previously obtained and that could reasonably be regarded as normal; and after that, the whole economic mechanism might break down. As a rule, however, it is made clear that these theoretical arguments alleging the temporary nature of full employment in the Soviet Union do not rest on any such speculations, but are meant rather to apply to a system of planned production that is assumed to continue in effect. We are therefore in a position to judge that their point is not well taken. For the analysis presented above indicates clearly that a system of planned production need experience no difficulty in maintaining full employment.

Planned Production and the "Optimum Allocation" Issue

Thus if production planning is to be disapproved, it must be disapproved on other grounds. The fact that it makes

conditions. As to the facts involved the writer does not venture an opinion. Of course full employment, as defined in chap. i above, presupposes a reasonable quota of transitional or frictional unemployment, as well as free choice of occupations and prevailing rates of pay, etc., for all who are not actually criminals subject to confinement.

Although "disguised unemployment" is treated herein as part of the allocation problem rather than as constituting actual unemployment (see chap. i), it is of some interest that the outstanding British authority on income statistics, Colin Clark, sees an enormous amount of "disguised unemployment" in Russian agriculture in and around 1934, due to the extremely high rural birthrate and the difficulty of transforming peasants into industrial workers, but finds that more recently "the Malthusian Devil is being cornered." *A Critique of Russian Statistics* (London, Macmillan & Co., Ltd., 1939), pp. 51-53, 68-69.

full employment possible does not mean that it is free of other serious defects. It can be argued that production planning interferes with optimum allocation in the broad sense. That is a separate and distinct question, and the merits or demerits of that charge must be subjected to a separate investigation.

Such an investigation lies outside the scope of this book, which sharply distinguishes the problem of full employment from the problem of optimum allocation and limits itself to describing the conditions under which the former would be assured. The main purpose of the present chapter is to point out why overall production planning represents one of the available economic policies under which full employment can be guaranteed. The chapters to follow will undertake the more elaborate analysis needed to show that production planning is only a sufficient and not a necessary condition of full employment, which can also be guaranteed, if certain policies are followed, in a market economy. If that can be established satisfactorily, then a rational choice between these alternatives can perhaps base itself squarely on a comparison of their merits in directing employed energy into the desired channels.

On this subject, however, even though it is not directly under consideration here, certain general remarks seem in order. For if production planning were obviously incompatible with a free and rational life, as its critics sometimes maintain, a demonstration of the possibility of obtaining assured full employment by means of production planning could be said to be irrelevant for the purposes of a study designed as groundwork for practical policy. Let us therefore devote a moment's attention to the foundations on which the case of the hostile critics purports to rest.

To begin with, it can be seen that the validity of the ar-

gument, that production planning interferes in some sense with the proper allocation of energy, must necessarily depend to a very large extent on the nature of the particular planned system under discussion. Many of the features, involving the essentially wasteful use of effort, that *may* be present in such a system are not inherent in production planning as such.

The slave states of antiquity were systems—perhaps usually aggregations of systems—of planned production. The population was fully employed; it is hard to conceive of an unemployment problem arising, for example, when the people of Egypt were building the pyramids of the Pharaohs. These pyramids, incidentally, were what was wanted most by those who had the power to make their wants effective, so that the economist concerned with optimum allocation cannot quarrel with this arrangement on formal grounds. The moment we introduce the principle of democracy, however, and further specify that the maximization of society's satisfactions requires some kind of relative equality in the distribution of society's income, such systems become altogether obnoxious.

Any modern nation nourishing its people on "guns" instead of "butter" would likewise be suspect; that is, the burden of proving the necessity for such a state of affairs would rest on those in a position to determine policy, and this regardless of whether production in such a nation were wholly planned or only planned in part. Here, of course, a final judgment is more difficult. As Adam Smith remarked, defense is of much more importance than opulence. It would therefore be important to know whether the military preparations represented provision for defense, or provision for aggression. For most Americans today, for example, the meaning of Adam Smith's words is a

little different from what it was for eighteenth-century Englishmen, dependent on maritime power for increased national income if not for national survival.

The self-evident point is that specific distortions such as those just mentioned are not essential to production planning. But may there nevertheless be general grounds for supposing that production planning makes it impossible or especially difficult to utilize labor power in such a way as to maximize the resulting total satisfactions, or total welfare? How well can a system of planned production meet the various requirements for optimum allocation?⁴

Production planning is quite evidently compatible with free consumer choice, as the expression is generally used, since the public can be given money incomes, to be spent for consumer goods in any way the particular individual prefers. Outright rationing can be resorted to instead, in dividing up what has been produced; however, conditions of real scarcity of essentials aside, there is no good reason why it should be.

Production planning as such is also compatible with real consumer sovereignty, meaning by that a state of affairs in which consumers do not merely exercise free choice in buying goods and services whose production some other authority has ordered, but actually determine what is to be produced. This sovereignty over the plan (which keeps the system from being the expression of the arbitrary ideas of a small, inside group) must presumably be exercised in two ways at once. Everyone recognizes the practical impossibility of letting all productive activity be regulated, even if only in ultimate and indirect fashion, by means of individual price offers. That is, the allocation of a part of so-

4. If the reader skipped chap. ii, he may care to refer back to it in connection with the following discussion.

ciety's total effort—to the building of roads and dams, the maintenance of defense and justice, the staffing of schools and agricultural experiment stations, etc., etc.—will have to be arranged collectively, through the system of political representation and (ordinarily) the budget, in accordance with the demands of society as a whole, which are not merely the summation of the demands of many individuals. Hence so far as concerns the aggregate volume and specific nature of production decisions that are entirely collective, including here presumably the decision as to the rate of social saving, the prerequisite for consumer sovereignty is an adequate mechanism for making political democracy effective. On the other hand, in the sphere in which consumers are spending money incomes for goods and services at their individual discretion, the prerequisite for consumer sovereignty is (ordinarily) ultimate responsiveness on the part of the production plan to the state of individual consumer demand.

In drawing up specifications to cover this part of production, the planning commission must attempt, with the help of the tools of modern statistical analysis, to anticipate what individual consumers will want to buy—so that here, indeed, effective production planning will approximate the results given, under similar income conditions, by production for market.⁵ The plan of production must be flexible,

5. A technique designed to fit the United States was partially worked out by Harold Loeb and associates in connection with the National Survey of Potential Product Capacity. See their summary in *The Chart of Plenty* (Viking Press, 1935). If, as in the U. S. S. R., the individual participates in the making of the plan in his capacity as a *producer*, what consumers will bid still needs to be taken into account (i.e., if an optimum allocation is to result) in finally deciding the quantities of output, except where social considerations make it necessary or desirable to amend the individual consumer verdict in any case; and where that is true, presumably the individual producer verdict will also have to be amended.

so that marketed items whose current output has to be disposed of at a price above their cost of production to prevent an excess of demand over supply will subsequently be planned for in larger quantities, while those items for which the price has to be lowered below cost to dispose of current output will, broadly speaking, subsequently be planned for on a somewhat smaller scale. Practical perplexities are admittedly bound to arise. In some cases, where an extension of mass-production methods would bring about a great saving in unit cost, it may be better to plan for more rather than less production when the current output of the commodities in question has to be sold at a loss. And in a good many other cases, where social costs or returns are found to diverge from the costs or returns directly accountable to a particular production unit, collective-consumer sovereignty must be permitted to amend somewhat the verdicts of individual-consumer sovereignty. These difficulties, however, are not peculiar to production planning, but are inherent rather in the process of making consumer sovereignty effective, whatever may be the nature of the economic system. As for the relative rapidity of response to changes in demand obtainable under production planning—the degree of flexibility of the plan over the course of time, as contrasted with the degree of flexibility shown by individual enterprise in an unplanned economy—that too will largely depend on the way the planning mechanism is set up. There is no obvious reason why the plan should not be subject to virtually continuous revision, in such of its details as can with any advantage be modified at frequent intervals.

This reasoning leads to the conclusion that it is not inherently impossible for a system of planned production to operate in such a way that marginal costs and marginal re-

turns are approximately equated throughout the economy—always remembering that particular costs and (especially) returns will vary with variations in income distribution on the one hand and in the degree of equality of participation in collectively taken decisions on the other. Equality of political participation, the principle of one man one vote, does not hinge on the existence or nonexistence of production planning. Neither does income distribution; the incomes that consumers spend can be equal or unequal, for services rendered or otherwise, as may be desired, so that presumably society will gravitate toward the particular income distribution that it believes will actually maximize satisfactions.⁶ It follows that there is no irreconcilable conflict between production planning and that aspect of optimum allocation having to do with the production of goods and services that are wanted more ahead of goods and services that are wanted less. There are, certainly, many practical difficulties to be overcome in striving for this goal. But the same is true in a market economy, where competitive advertising, idle plant capacity as developed in monopolistic and partially monopolistic situations, and certain other uneconomical phenomena to which reference has already been made (and incidentally also the maintenance of strict quantitative control over frictional unemployment) present problems not duplicated on the same scale when production proceeds under a central plan.

An equally fundamental aspect of optimum allocation

6. This of course is not intended to deny the striking fact that historically production for market has meant that some consumers (the poor) have had difficulty in getting one vote, whether political or economic, while some (the rich) have in effect had a great many votes of both kinds, so that those in favor of something like equal political and economic voting have had practical reasons, based on experience, for espousing production planning.

centers around free choice of occupations, and around satisfactory working conditions generally. Here too it is difficult to make out a substantial case against production planning as such.

In a practical sense the individual can expect to be about as free to choose his occupation in a system of planned production as in a market economy. It is true that the individual's position as a producer will probably be analogous to that of a consumer exercising choice but not sovereignty, which means that it will be a shade less satisfactory than the position theoretically enjoyed by a worker in a market economy, who can (supposedly) always get into even the most overcrowded kind of work by accepting a slight reduction in pay. For although the planning commission might be authorized to take into account, as the plan is periodically revised, not only the preferences that individuals have expressed in buying consumer goods but also those that they have expressed in applying for jobs, it seems rather more probable that the available amount of employment of any particular kind will not be subject to rapid expansion or contraction in this way through revision of the production plan. But the actual difference, so far as concerns the freedom of choice of occupation in a system of planned production on the one hand and a (real, rather than theoretical) market economy on the other, is hardly likely to be felt by the great majority of persons. The ordinary worker can have, under production planning, the same range of choice, subject to his satisfying the conditions of eligibility, as he has in an unplanned system. The important question, from his point of view, is whether or not he will have an opportunity to train himself so as to become eligible for the kind of work he prefers, and to this

requirement a planned economy may well be expected to give attention.

Meanwhile there is no reason why the individual artist, writer, or other proprietor of his own special skill need be regimented. The would-be business enterpriser might find it difficult or impossible to launch out for himself in the traditional manner, but this need not be the case if the system has its recognized fringe or sphere of small-scale production for market. The ability to organize and manage large enterprises will be as much in demand as ever, and inventive brains will be also. Finally, there is nothing about production planning implying a set of relationships between workers and management unfair or distasteful to either side.

Thus we may tentatively conclude that many of the criticisms leveled against production planning, while they are valid as against abuses to which such planning might under certain circumstances be subject, do not succeed in indicating any intrinsic weakness in the process itself.

A fundamental problem remains, however. It may be that a system of planned production necessarily involves such a centralization of the actual process of certifying and administering decisions that the net results of society's economic efforts will be disappointingly small even though the difficulties mentioned above have been squarely met and overcome—even though, that is, equality of opportunity prevails and the plan is drawn up in such a way as to be perfectly responsive to public opinion.

The problem is this. Let us suppose that production, far from being arbitrarily determined by a small inner group, is sensitively adjusted to individual and collective consumer demand, the planning commission acting in no sense

as a principal and in every sense as an agent for the people. Will there nevertheless be required, to see that the plan is properly carried out, an administrative apparatus sufficiently large to constitute a heavy, otherwise unnecessary, overhead cost on production as a whole? More crucial still, need the fact that the immediate decision as to the scale of output of the individual production unit is taken out of the hands of the individual management eliminate the drive for efficiency that the threat of economic extinction tends to produce under competitive production for market? Will it stifle the free spirit of individual managerial initiative, thereby depriving society of the services of its ablest and most independent industrial executives and imperiling the spontaneous drive for new methods and lowered costs? Must the economy lose the benefits of its "self-acting" qualities?

These questions need to be examined further, without prejudice, by thoughtful people. Whether the final answer to them be affirmative or negative, it seems certain that the heart of the production planning issue lies here. Too often it is argued without proof (and quite fallaciously, if the above reasoning is correct) that production planning must be arbitrary and undemocratic. On the other hand the somewhat specialized professional interest of economic theorists has led some of them, in considering such planning, to place excessive emphasis on the difficulty of securing economy or efficiency (i.e., of equating marginal costs and returns) in a formal and narrow sense. The real case, however, must be made or lost on the issue of decentralization of responsibility for output decisions for its own sake.

For practical purposes, moreover, this case must always be considered in its immediate context. Thus the strength of the tradition of the decentralized market economy is ob-

viously one of the most important factors bearing upon the merits of a program designed to secure full employment in the United States today by way of overall production planning, as against the merits of a program designed to secure it without such a radical change in procedure. This assumes that full employment can in fact also be secured in a market economy. We must now take up that fundamental question.

Chapter V

First Principles of a Full-Employment Market Economy

IF the elements of planned production included in a market economy are always large enough to absorb that part of the total labor supply not used for production for market—so that, however large or small these elements of planned production may be normally, they are automatically expanded if and as the employment given by production for market contracts, in relation to the labor supply—then, as previously stated, full employment will be assured. This truism serves to call attention to the potentially important role of planned production even in a market economy. As will become clear in a moment, however, it leaves a vital question unanswered. How is planned production to be kept from swallowing production for market, supposing the latter shows signs of developing a spontaneous tendency to contract?

The Need for an Independent Regulator Other Than Public Works

LET us construct in the imagination the main outlines of a full-employment market economy. Naturally, it will contain areas of production planning. Its *normal* or *nonemergency* planned production, for which we find a counterpart in every economic system, will include, first, all those primary governmental activities which it is necessary to plan

and organize collectively, if the services or goods are to be provided at all, and second, any activities for which, although market production is not inherently impossible, production planning has come to be regarded as the preferable procedure. Moreover, in addition to its normal planned production, such an economy will require, to make full employment certain, a category of special or *emergency* public employment. That is, it will need an expansible (and contractible) program of public works—or rather, since the latter should be construed in the broadest sense, of public *work*.

This is all familiar, theoretically speaking, and therefore need not detain us. So far as concerns the important question of emergency public employment, the essential point is that a full-employment market economy will have ready as its final line of defense against unemployment a sufficient number of public activities that can be started or expanded if and when it becomes necessary to take up slack in the system, and discontinued or tapered off upon the appearance of increased demand for labor in regular lines of work. This presupposes the existence of suitable statistics, compiled at the head office of the U. S. Employment Service or elsewhere, to indicate when the accepted normal quota of frictional unemployment is being exceeded. An adequate set of unemployment records will of course show not only the volume of involuntary idleness but also the locations and the kinds or skills of labor affected. Consequently, if a sufficiently wide range of projects has been planned in advance (including nonconstruction as well as construction work, and W.P.A.-type as well as P.W.A.-type undertakings), a selection of projects can always be made that will be properly adapted to the needs of the immediate situation. This division of the economy will act, in

short, as a general employment-insurance mechanism, which might be formally recognized in its title and financial methods.

But—here is the critical consideration—is it not conceivable that a market economy, if it relies solely on the possibility of expanding planned production whenever production for market contracts, may be obliged to transform itself into its opposite in order to stave off unemployment?

Suppose that the initiation of a program of public works sufficient to take care of all the unemployed results in—or at any rate is followed by—a contraction of production for market. (The reasonableness or unreasonableness of this reaction is not in question here; the public-works program might accentuate certain maladjustments due to specific price rigidities, notably in the construction industry itself, or on the other hand the contraction of private enterprise might seem to have the characteristics of a political maneuver; all this is beside the present point.) There will then be a new gap to be filled by more planned production. When that in turn is undertaken, will production for market contract still further? The moment this question is asked, it becomes clear that a society determined to guarantee jobs, and at the same time convinced of the advantages of production for market, may find itself in insoluble difficulties if it does not possess *some kind of instrument or device that will serve to control the aggregate volume (as opposed to the separate components) of market production.*

This statement should not be misunderstood. It is not suggested that production for market will *necessarily* contract as government's planned employment expands. Such a contention is not warranted by any available evidence, and moreover it seems probable that at the present time a number of kinds of planned-production expenditure could

be named—and not alone expenditures for defense—that would definitely stimulate rather than depress normal business enterprise. Nevertheless, the possibility of the adverse repercussions mentioned must be insisted upon. For if this is not brought out into the light, it is futile to hope to understand either current events or the elementary principles of a full-employment market economy—the first of which is that the area of production for market must be made to achieve a substantial balance in its own right.

Let the matter at issue be restated. The existence of a market economy in any country presupposes a preference for the market procedure except in those particular areas (normal planned production) in which the alternative method has come to be regarded as superior on its own merits. Assume that the number and extent of these exceptions, or in other words the proper division of the total field as between production for market and normal planned production, have been settled for the time being. It will then be reasonable to utilize a flexible public-work program (emergency planned production) as a *secondary* check against the growth of unemployment, caused by a temporarily deficient volume of production for market, but it will hardly be satisfactory to have to rely on this as the *primary* defense mechanism. For, in the latter case—possessing no other, independent means whereby the volume of economic activity may, by and large, be maintained—how can society be sure that full employment will be preserved without an expansion of planned production far beyond the limits within which it is preferred for its own sake, and conceivably even to the extreme where the economy ceases to be a market economy at all?

This point deserves great emphasis, even at the risk of laboring it unduly. Full employment can indeed be main-

tained if planned production is pushed into every space left vacant by production for market. In the rather abstract sense that society cannot be absolutely *certain* of what its individual members may or may not do, there is perhaps no *final* guarantee that full employment will be maintained if planned production cannot be expanded when and to the extent that other measures prove insufficient. Moreover, if the general public desires a system with a very large volume of production planning, or the same thing carried a stage or two further and simplified by the introduction of a carefully integrated, overall production plan, then that must be the kind of economic system that the country should have. But, on the other hand, it would be too bad for the public to elect one kind of system, say an economy with a preponderance of production for market, and then be forced involuntarily, in the mere process of fighting off unemployment, into another, quite different state of affairs. That, surely, would indicate a sad lack of social competence.

The Monetary Circulation in General and Consumer Spending in Particular

WHAT then is to be done? How can the typical individual factory or other production unit be left in control of its own expansion and contraction, and society at the same time retain control over the total volume of economic activity? That, essentially, is the problem to be solved.

At first glance it might seem that no solution was thinkable. The individual production activities are real, but what is "the total volume of activity" but an arithmetical abstraction? How is it possible to control total activity

without controlling or directing the individual components making up the total?

While in a certain sense this objection is valid, further reflection suggests that the case is perhaps not hopeless. However, it appears to be necessary to conclude that only two general types of solution are possible, even in theory.

We start with the fact that, in a market economy, as goods are produced and passed along and as services of one kind or another are rendered, a stream of monetary payments consisting of transfers of demand deposits and currency¹ moves at virtually every stage counter to the stream of goods and services. The first general solution, then, is ability to enforce a sufficient degree of flexibility in all prices so that the physical flow of goods and services is not affected by variations in the size of the monetary flow, the former remaining as large as desired (that is, large enough to prevent the development of unemployment) even if the latter becomes to some extent dammed up and reduced in volume. And the other general solution is a sufficient con-

1. It is not necessary for our purposes here to go into certain formal questions relating to the nature of money that become important in connection with special problems. The argument will assume that "money" consists of demand deposits (deposits subject to check, checking deposits) and currency, and that time deposits, call loans, etc., have to be transferred into demand deposits or currency before they can be spent as money—an assumption that appears to fit present American practice reasonably well. Of course all kinds of bookkeeping variations have been tried somewhere or are possible; for example, giro systems, and arrangements under which debits (or overdrafts) are transferred instead of credits (deposits). The conclusions to be drawn herein could perfectly well be applied to such monetary systems if necessary, and they remain unaffected by technical inadequacies or ambiguities in the above definition of the present American money supply—e.g., the point that checks that clear within bank accounts (or else the bank overdrafts often briefly occasioned in connection with such checks) can properly be regarded as a distinct form of money, supplementary to demand deposits, created by businessmen themselves.

trol over the monetary flow so that, even though prices are by no means all flexible, there is no occasion for a general pressure on prices and a resulting general contraction of the physical flow.

The growing rigidities in our structure of prices have been so widely publicized that it is unnecessary to take any time in dismissing the former theoretical alternative as impracticable in fact. In the abstract it is conceivable that prices might become free, so that they, and not the quantities of output produced and sold, would fluctuate with changes in the rate of money expenditure. In the heyday of price competition, this appears to have been what actually happened to a very considerable extent, and naturally there is a school of thought that now insists on trying to reverse the course of history. In partial justification of such attempts it should be said that a good deal can doubtless be done to break the grip that monopolies have established on prices at particular points in the economic system. Indeed it is extremely important that real progress be made in that direction. But it is impossible to restore enough price flexibility so that the amount of employment given by production for market will take care of itself.

This means that the instrument or device for controlling the aggregate volume (as opposed to the separate components) of market production must be found, if at all, in the monetary circulation. It would seem that that can be regarded as the second of the elementary principles for which we are looking. It is not necessary to deny that the price structure might become less rigid than it is at present. The crucial point is that, in the absence of complete price flexibility, which is out of the question, control over the monetary circulation remains indispensable for assured full employment in a market economy. Let the reader ponder

the matter for himself, if he feels that large issues are being disposed of here too summarily.

To be sure, all that has been claimed thus far is that the monetary flow *accompanies* the flow of goods and services. But when we recall in connection with this the fact that production for market proceeds on the basis of comparisons between producers' anticipated inflow payments or money receipts and their anticipated outflow payments or money costs, it seems at least inherently probable that the monetary stream can be made to exert causal influence over the stream of production activity.

In relation to planned production, the function of the monetary mechanism is mainly an accounting function. Money is not called upon to provide quantitative control.² The planned activities as it were requisition the services of as much money as may be necessary to enable them to take place as planned; or, stating this differently, a quantity of money such as the aggregate sum advanced by the banks to planned production is merely the shadow accompanying the substance of the real transactions decided upon. When it comes to production for market, on the other hand, it can presumably happen that aggregate sums of payment are determined independently of the purposes for which the included amounts may, as it turns out, be used. These notions suggest a further analogy applicable to different types of economy. In a system of planned production, money is cast in the humble role of a servant who is continually being assigned specific tasks to perform for society. In a market economy not equipped with controls such as will assure

2. That is, the physical plan of production comes first, although it may prove convenient—as witness Russia's "control by the rouble"—to have the banking system take a leading part in seeing that the plan is properly executed.

full employment, it is a somewhat dangerous and unstable ally, now and again threatening to assert itself as society's master. In a full-employment market economy, can it not be conceived of as occupying the position of society's steward—a steward whose business it is to secure maximum economy of the administrative control apparatus, maximum automaticity in its functioning, and the widest socially useful decentralization and diffusion of responsibility for economic decisions?

Holding such speculations in the background for the present, let us take a comprehensive view of what happens, under conditions of full employment, to the stream of money payments circling back and forth between production and consumption. The first thing to be said is that, except as price levels may change, a constant rate of production and sale of goods and services will be associated with a constant rate of flow of money payments, and an increased rate of production (necessary to maintain capacity operation if technical efficiency is rising) with a proportionately increased flow of payments. It must obviously be added that the volume of payments associated with production for market may decline without implying any general contraction, provided the volume of payments "pumped out" by planned production is expanding correspondingly. However, if such a change of proportions between production for market and planned production is not occurring, the flow of money payments associated with the former will be found to be constant, in the sense and with the exceptions indicated above. In other words, if the volume of production for market is to be maintained, as distinct from the total volume of production, a continuously adequate flow of money payments is required in that department. From this it follows that, if full employment is to be assured

without an undesired contraction in production for market as such, society must at any rate be in control of the volume of payments to and from production enterprises motivated by the market principle.

In speaking of the in-payments and out-payments of market producers in the aggregate, it is necessary and legitimate to exclude the payments made by one producer to another—such as those made in purchase of cotton yarn by a manufacturer of cotton cloth, or for the purchase (or lease) of equipment, or for electric power, transportation, fire insurance, or other services—since from the general standpoint all such payments constitute producer receipts and producer expenditures at one and the same time. Thus the items of primary significance are on the one hand wages, rents and royalties, interest, dividends,³ taxes on business, etc.⁴—i.e., the out-payments or money costs of production that do not constitute interproducer transfers, and, on the other hand, the in-payments in the form of (a) ultimate consumer expenditure⁵ and (b) invested consumer savings.

For a macroscopic first view of the situation a further

3. Excluding intercorporate dividends, etc., i.e., rents and royalties, interest, and dividends paid to other producers.

4. Include here any excess of allowances set aside for depreciation, etc., over replacement expenditures from funds similarly accumulated in the past. See the discussion of "financial prudence" in the next chapter.

5. Naturally a consumer spends money just as much when he (b) buys securities or life insurance as when he (a) buys food or clothing or rents a house, but by common consent (a) only is meant when the term "consumer expenditure" or "consumer spending" is used, (b) being classed separately as the investing of consumer savings. This usage is followed herein. The further distinction between *individual* consumer spending and *collective* or *public* spending for final consumption output, whose place in the picture will be discussed in chap. vii, does not affect the argument at present. Similarly with *business* savings, by way of depreciation reserves (cf. previous footnote) and undistributed profits, and these too are treated in chap. vii. For other possible ambiguities in the concept of consumer spending see p. 218, n. 5 below.

simplification is advantageous. When savings are invested in enterprises producing for the market, they are not, like expenditures on consumption, turned over to producers for value immediately received, but rather they are turned over with the condition attached that somewhere there shall in future be sales enabling the saver to be recompensed by payments of interest and principal. Hence producer receipts in the form of consumer expenditures may be regarded as revenues pure and simple, while producer receipts in the form of invested savings are weighted with obligations—and the ability to fulfill the latter depends ultimately, although consumer markets may be several stages removed from the point of investment, on future consumer expenditures. The conclusion to which this leads, which constitutes the third basic principle of a full-employment market economy, is that in its main aspect the problem of the monetary circulation in the province of production for market is the problem of consumers' payments for consumer goods and services, over against producers' money costs, interproducer payments excluded. This is said even though (*a*) a part of the actual current stream of payments to production derives from savings, (*b*) a situation may conceivably arise in which a contraction of production starts because the savings inflow ceases to be adequate to maintain the investment activities actually in process, and (*c*) the production of capital goods purchased with savings may for short periods act in response to forces dissociated from the current amount of consumer spending—for example, anticipations of price changes.⁶

6. Also, complications may arise where different industries have different elasticities of response to changes in the demand for their particular products, or, if similar in that respect, have different elasticities of demand for labor. The various qualifications and complications here briefly noted are taken up below, especially in the next chapter.

In short, the central monetary problem in a market economy comes down to this. The volume of production for market will maintain itself only if producers operating on this principle anticipate that aggregate consumer spending will continue, either automatically or as a result of conscious social action, in such relation to their aggregate anticipated money costs as to justify or motivate production at an undiminished rate.

Whether anticipated consumer spending does or does not automatically remain in the full-employment relation to anticipated producer costs is a question of fact, and everyone knows the answer, in spite of disagreements over the explanation for the answer. For the present, let us keep in the foreground the fact itself. The record shows that consumer spending cannot be counted on to remain of its own accord in the required relation to producer costs. Therefore it is necessary, if full employment is to be maintained through production for market itself, for society to act consciously to safeguard this relation.

It is evident that both anticipated costs and anticipated returns govern decisions to expand or contract production for market. Moreover, insofar as future trends of costs and returns are subject to uncertainty, there are various things that may affect the degree of optimism with which the prospects involving costs and returns are viewed by business management. It would therefore be foolish to deny that there are numerous ways or combinations of ways in which society might conceivably act to hold anticipations of costs and returns in proper balance. Taxes on business enterprise can be lowered to promote business expansion, subsidies can be given, and so on—although it is not easy for governments to subsidize without conferring favors unjustly as regards persons and unwisely so far as the alloca-

tion of society's productive energy is concerned, and without assuming responsibility for given enterprises such as may finally invite planned production.⁷ In addition to special measures such as these, confidence can be built up by a clarification of the rules governing the operation of the system—assuming always that society has the system's main tendencies well under control, so that uncertainty about the future can be confined to questions of changes in demand and supply affecting the competitive position of particular industries. There may thus seem to be a confusing multiplicity of possible approaches to the problem in hand.

However, it happens that the dynamic of the process of production for market itself provides us with a clue to simplification of this problem—a clue, therefore, that seems likely to be of the greatest significance so far as practical policy is concerned. A business is normally carried on *because* it is expected that the product can be sold. It proceeds as a result of final causes, as the term is used in logic, and while in one sense the motive to produce is not present until prospective costs have been weighed along with prospective returns, in another sense the prospective returns come into the picture first. Possibly this can be traced to a general human tendency (or at least a tendency observable

7. Reconstruction Finance Corporation loans to railroads that would otherwise have met with bankruptcy and drastic deflation of their capital values furnish a case in point, among many recent illustrations. Much more could of course be said about the dangers of special government subsidies—which under present conditions must be advocated quite as much by Republicans as by Democrats. Especially insofar as they prevent the reorganization of uneconomic business giants, such interventions perpetuate and increase the very price distortions that not only are inconsistent with optimum allocation but also, in an expanding-contracting economy, hold the latent forces for expansion in check.

in Occidental, temperate regions) to act unless good reason can be found to the contrary, in preference to remaining passive until inaction can be shown to involve sacrifices. However that may be, to say that the prospect of sale is the only ultimate basis for the existence of production for market is to throw the problem of production motivation into a form that will seem sensible to practical men.

The whole corpus of traditional economic analysis, cost theories of value included, has this point of view as its foundation—even though parts of the theoretical superstructure erected at various times give the impression of having lost contact with their base. The fact that demand motivates production constitutes the element of truth in the ambiguous saying that the only object of (profit-making) production is consumption. The demand for producer goods derives of course from the demand for the goods or services that they will create, so that at each point the demand in the last analysis comes back through as many stages as may intervene before the end results of productive effort are disposed of in some consumer market, and are therefore processed no further. Hence expected final consumer demand, carefully calculated or broadly assumed, is the ultimate magnet to which production responds. The extent to which a given variation in the demand for some final product may affect the derived demand farther back can hardly be stated so simply, since a change in the rate of growth or rate of decline in the former may sometimes produce, in accordance with the so-called acceleration principle, a change in the direction of movement of the latter. That, however, is a subsidiary question. The basic impulse in any event runs from consumption to production.

Any other view of the rationale of production for market, if carried to its logical conclusion, leads to absurdity. This is not to neglect the importance of savings. In the first place, in many times and countries the flow of savings has doubtless been inadequate to permit progress in the form of capital development to proceed as fast as business enterprisers and statesmen would have liked; here, although unemployment has presumably not been in question, too high a percentage of total employment has appeared to be concerned with the direct satisfaction of consumption wants. In the second place, there may in certain circumstances develop a shortage of savings in relation to investment activities in process (notably, the construction projects actually begun), with the result that the latter are obliged to shut down and, before the factors of production involved can be transferred to production for consumer markets, contraction communicates itself to the rest of the system. It is possible that certain depressions in history may have got their immediate impetus from such under-saving as this. Be that as it may, however, it cannot be deduced in theory or demonstrated from the record that the inclination to save a part of total money income can of itself motivate activity in the capital-goods section of production. For if consumer demand fails, the prospects of profit will grow dim, irrespective of the existence of savings, and production and employment will decline. An adequate supply of investible funds is therefore a necessary but not a sufficient condition for the maintenance of the volume of production in the forms that production currently assumes, and in a long-run view saving is not a condition for full employment in any sense at all.

These arguments are so familiar, and the conclusion

about to be stated follows so naturally from them, that there is reason to be optimistic about the ultimate general acceptance of this conclusion. It would seem that the first concern of a society desiring to maintain full employment without sacrificing production for market would be to maintain the volume or rate of anticipated consumer spending. Here is the fourth elementary principle of a full-employment market economy. The application of this principle would involve a guarantee by government that the volume or rate of consumer spending calculated to be adequate to induce production at the full-employment level would in fact materialize. To make this statement is to recognize at once that "planning *versus* not planning" is not a real issue if full employment is to be maintained, since some planning is involved even if direct *production* planning is avoided.

A discussion of how an "adequate" amount of consumer spending might be calculated, and of the various implications and corollaries of the general proposition as stated, must be reserved for later chapters. The proposition itself, however, need not be obscure. Consumer spending could be maintained by simply maintaining it. Ideally, the guarantee would motivate and result in the anticipated level of production for market, thus securing full employment without any expansion of public works. In any case, the guarantee would tend to fulfill itself by way of payments to income made in the course of production for market *and* planned production. Any deficiency in total income arriving by the normal channels, or in the spending of income actually received, could be made good by distribution of extra money income in accordance with any preferred principle.

Production Expense and Purchasing Power—the Cart and the Horse of Economics

IMAGINE a situation in which, as in the world depicted by classical economic theory, a state of full-employment equilibrium maintains itself automatically.⁸ Partial overproductions occur, but the ensuing contractions are counter-balanced by expansions in other directions, and the local shocks resulting from incorrect foresight and change are absorbed without involving the system as a whole in difficulty, because they are taken up by means of price variations—including variations in the rate of interest, which is presumed to equate the supply of saved money income with the demand for funds to finance investment. If new money enters, or old money leaves, the stream of circulation at any point, some upward (downward) pressure will be exerted upon prices generally, with production and demand still continuously maintaining each other by reciprocal action at the same real level as before. In such (imaginary) circumstances as these, just because social control is by definition absolutely not required to maintain a full volume of activity, the question whether the horse of consumer demand is pulling the cart of producer costs, i.e., payments to income, or whether on the other hand the cart of producer costs contains a force of its own enabling it to propel the horse of consumer demand, is not a question of any particular significance.

8. J. B. Say's famous theory of markets asserted that general overproduction or underconsumption was impossible because goods themselves furnished the demand for other goods. Said Malthus to this (but the classical school took no notice). "What, I would ask, would become of the demand for commodities, if all consumption except bread and water were suspended for the next half year?" (T. R. Malthus, *Principles of Political Economy* [1st ed., London, 1820], pp. 363-364 n.)

However, the same cannot be said of a system of planned production. Here the sequence of events definitely runs from planning, to the incurring of costs in production, to the expenditure of income thus received in purchase of the output thus produced. The cart certainly has a motor (the plan of production) and pushes the horse along.⁹

A real market economy may find itself momentarily in full-employment equilibrium without control being consciously exercised to that end—a situation corresponding to the ideal theoretical case described a moment ago. On the other hand, it may never achieve full employment even in the best of years. In any event, as time goes by, the pace of the horse and cart will be seen to be very erratic. Obviously the volume of payments by and to consumers is subject to extreme fluctuations.¹⁰ The horse without doubt is pulling the cart, and occasionally it rather looks as though the horse were acting on notions of his own. But on the whole, when the horse slows down, it seems as if the driver of the cart, grown doubtful of the horse's constitution, were applying the brakes and retarding the horse's progress—to the intense discomfiture of the driver himself and the various passengers. For some time, then, the hand that holds the whip appears to be paralyzed. (Hundreds of books and articles have of course been written to explain what really happens as the horse and cart go through their

9. If the horse looks *de trop* in this picture, it may be recalled that at any rate the final goal of production planners is a régime wherein scarcity has been overcome and all goods are free to consumers. Here indeed the horse vanishes.

10. See National Resources Committee, *Structure of the American Economy*: Part I, tables, pp. 380, 381, showing the amount and proportion of national income paid out, 1919-37, and consumer income and expenditures, 1929-38. According to this estimate the dollar amounts of consumer spending in the United States, beginning with 1929, were (in billions). 62.3, 56.6, 49.8, 40.8, 39.2, 43.4, 47.8, 53.0, 56.0, and 51.4.

cyclical changes of pace in an uncontrolled market economy¹¹—where government neither provides the cart with a motor, in the form of supplementary planned production, powerful enough to keep the wheels from slowing down, nor rides the horse like an artilleryman and makes him hold his gait.)

Nineteenth-century America was a world in which the enormous natural resources of an ever-expanding domain were seized and developed at a feverish pace. A rapidly enlarging population supplied the hand and muscle and brain for this. Great inventions continually opened up new possibilities. The stream of native savings was relatively small, and therefore was readily channeled into capital development. Severe depressions occurred periodically, to be sure. Moreover, for decades at a time the money supply was unable to keep abreast of the growth in production, so that price levels were pushed downward, making trouble for those producers whose efficiency was increasing at less than average speed. In spite of halts and difficulties, however, the man of enterprise had so many opportunities to throw the natural wealth of the continent and the technical magic of the engineer and the brawn of labor into combinations yielding a profit that the system surged irresistibly forward. The businessman certainly expected to sell his products to the continuously growing population, but at the same time his decisions derived from a sense of adventure and optimism at least as much as from any attempt to split hairs in forecasting the dollar size of the demand. The

11. See Wesley C. Mitchell, *Business Cycles: The Problem and Its Setting* (National Bureau of Economic Research, Inc., 1927), and Gottfried von Haberler, *Prosperity and Depression: A Theoretical Analysis of Cyclical Movements* (League of Nations, Geneva, 1936), to mention merely two of the outstanding works on the subject of the cycle that survey a variety of partly complementary and partly contending theories.

confidence of himself and others like him expanded the purchasing power in the hands of consumers and thereby in turn provided its own justification. Thus the driver cracked the whip (in those horse-and-buggy days!), and the cart got rapidly forward.

When the best of the private claims on the soil, the forests, and the mineral wealth of our country had all been staked out (a process wherein society ran a gigantic deficit, as true accounting would have shown, by transferring its assets to individuals for a great deal less than those assets were worth), and when the stream of tractable immigrant labor began to dwindle, there can be no doubt that the objective conditions within which enterprise had to work were radically altered. Invention might proceed as rapidly as before, or even more rapidly. The fact remained that the domestic territorial frontier was gone, and that labor, coming to think in terms of an American standard of living and moreover organizing itself more and more into unions, was asking a larger share of business earnings. Thus the sources of profit were not any longer so obvious. Powerful monopolies, entrenched at strategic points, fared very well. But to the newcomer on the scene, and the little enterpriser generally, the situation appeared less auspicious than it had been in earlier times, and the forces that squeezed him whenever contraction had once set in were rendered all the more relentless by the rise of the economic giants and the consequent increasing rigidity of prices other than his own. Taking the country as a whole, therefore, it was only natural that spontaneous business optimism should suffer a certain check.

We have seen that, if pure competition becomes transformed into monopolistic competition, the businessman is obliged to begin to think of the effect that an expansion of

his output will have on the price he will be able to charge. He does not so readily become aware of the analogous, but opposite, effect that his action will have on income and thus on demand—for the good and sufficient reason that only a very small part, if any, of what he pays out will ordinarily come back to him in the form of demand for his particular product. All the same, spontaneous optimism about the possibility of selling any useful product has of necessity been gradually replaced by conscious attempts to forecast the demand exactly and—a step beyond that—by a recognition that the total national demand depends by and large on the scale at which production itself pays out income.

The rapid development of statistical services has played an important part in promoting this form of business self-consciousness. The reëmergence of underconsumption theory and related views has also advanced the process. The man in the street is something of an underconsumptionist by instinct, and therefore able to see a good deal of sense in opinions such as those expressed with varying degrees of skill in the writings of men like Hobson and Major Douglas in England and Foster and Catchings in the United States, views that generations of orthodox economists either ignored entirely or treated as definite heresy. In recent years, thanks largely to the efforts of the monetary theorists to get to the bottom of the problem of purchasing power and the monetary circulation generally, it has no longer been possible for anyone to maintain confidently that one side of the controversy consisted of sound views and the other side merely of a conglomeration of crackpot notions. How far the professional economists have moved is strikingly attested, for example, by the fact that the latest monograph on cyclical fluctuations issued by the economic intelligence service of the League of Nations

concludes that the most decisive measures for bringing about a state of equilibrium are policies for stabilizing consumption.¹² Undoubtedly, the need to maintain purchasing power by deliberate action is coming to be more and more a part of the conscious thought of experts and the general public alike.

At the same time, it would be a mistake to exaggerate the extent to which public opinion on this subject has matured. Insofar as consumer markets are supported accidentally, incidentally, indirectly, or as the result of the pressures brought to bear by special groups in the community, the day is postponed when conscious and deliberate control over the flow of purchasing power as such becomes a paramount public issue. Palliatives tend to conceal the need for a cure. The palliatives in this case have taken the form of injections of purchasing power by means of wartime monetary expansion, foreign loans to maintain sales in the export market, installment selling, fictitious wealth created in the stock market, veterans' bonus, benefits to farmers, relief payments, and so on.

Thus at present American economic thought is confused and undecided. We are certainly not unaware of the im-

12. J. Tinbergen, *Business Cycles in the United States of America, 1919-1932: Statistical Testing of Business-Cycle Theories*, II (League of Nations Publications, Series 2A, No. 16, Geneva, 1939), pp. 169-170. Compare the following statements by Professor Hansen: "It may be that we have reached a stage in the development of modern industry in which free enterprise and the price system cannot continue to function unless we develop new institutions, in coöperation with the central banks, to safeguard the maintenance of *purchasing power as a whole*. . . . It is becoming a serious question whether modern communities can escape the dilemma either of undertaking the maintenance of total purchasing power (leaving private initiative to carry on the great bulk of economic activities) or else of taking over the operation of all enterprise itself." Alvin Harvey Hansen, *Full Recovery or Stagnation?* (W. W. Norton & Co., Inc., 1938), pp. 159-160; italics in original.

portance of maintaining consumer spending. Indeed it is considered to add to the merit of any measure devised for some other end that it will, incidentally, expand our purchasing power.¹³ But on the other hand we are certainly not dealing seriously with the possibility of maintaining consumer spending directly and absolutely. Officially we take the view that such things as the size of the national income and the volume of production for market are not subject to human control—but, rather, subjects for hope, fear, and speculation. This state of mind is perfectly revealed in a comment by President Roosevelt on the prospective budget for the fiscal year 1941. "When asked whether he did not expect a continuance of the current business volume for some time to come, Mr. Roosevelt replied with a smile that he was not playing the market."¹⁴ The remark might have been made by almost anybody. Since it happened to come from the nation's chief executive, it will perhaps be preserved as a classic long after society has evolved, and insisted on putting into effect, a program rendering involuntary unemployment impossible.

13. The notion that the budget should be balanced only over the cycle as a whole, with short-period deficits in time of depression offset by surpluses in prosperity, has recently gained many adherents. Some economists moreover have combined this idea with the proposal to set up semiautomatic mechanisms (operating through the unemployment compensation system, the regular tax system, or otherwise) designed to counteract directly the spontaneously occurring fluctuations in consumer purchasing power. To catalogue all these proposals—which evidently point in the direction of the suggestion offered herein—would carry us needlessly far afield. Mention may, however, be made of J. E. Meade's *Consumers' Credits and Unemployment* (London, Oxford University Press, 1938) as being in some respects of particular interest in this connection.

14. *New York Times*, November 25, 1939. Again, in a press conference as reported in the *Times* of February 6, 1940, Mr. Roosevelt "added that in times like these it was hazardous to forecast when the \$80,000,000,000 national income figure might be reached."

Conclusions and General Summary, with Emphasis on "National Income Insurance"

THIS is a convenient point from which to survey the ground we have thus far covered, as well as the terrain ahead.

The assurance of full employment, which is not contained in policies heretofore pursued by the New Deal or in the traditional Republican program, can be achieved under comprehensive production planning and presumably also under production for market. If on independent grounds it is desired to hold planned production within well-defined limits, then some device is needed that will serve to control the aggregate volume (as opposed to the separate components) of market production, enabling this basic sector of the economy to achieve a substantial balance in its own right and limiting the demands placed on the flexible program of emergency public employment. Since adequate price flexibility is not a practical possibility, it is necessary to conclude that the monetary framework of production (the flow of payments around the production-consumption circuit) must be dealt with in a fundamental manner. Because the use of savings to create capital goods ultimately depends on expected consumer demand, interest centers on the volume of anticipated consumer spending, taken in relation to the net volume of anticipated producer costs. And here for various reasons it looks as if the first point of attack should be the volume or rate of anticipated consumer spending.

A government guarantee or underwriting of consumer spending would actually result, let us say, in the same amount of consumer spending as would be brought about indirectly, without that guarantee, by an expansion of

emergency public employment on a scale sufficient to prevent the development of unemployment; but it would produce this expenditure in a way calculated to keep the balance between employment in production for market and employment in planned production under much more satisfactory control. Such national income insurance—as it might popularly be called—would also confer its benefits on enterprises producing for market with an impartiality and absence of direct intervention difficult to achieve in any regulation of the cost end of the decisive costs-and-returns relationship.

It cannot be claimed of course that the volume of employment depends on the amount of anticipated consumer spending *only*. The rate of money wages is also of primary significance, since the aggregate amount of employment offered by producers for market tends to vary inversely with the cost to them of hiring labor, as well as directly with consumer demand. Moreover, even if anticipated consumer spending and money-wage levels both remained constant, it would still be possible for the amount of employment offered to change, either because of a change in the amount of production—particularly the amount of production in the capital goods industries—induced by a given amount of consumer spending, or because of a change in the amount of labor required for a given amount of production. A number of different variable factors can be seen to be here involved, and the whole subject is sufficiently complex to require a separate discussion. This will be undertaken next, at the beginning of the third section, which will necessarily be somewhat more technical in approach than most parts of the two sections now concluded. However, it seems highly doubtful that the conclusions suggested by the ensuing phase of the investigation constitute

a set of first principles to which the principle of "national income insurance" is subordinate. The relationship, surely, is the other way around.

The argument already completed, taken together with the next chapter, sets the stage for an examination of the financial problems connected with the maintenance of full employment in a market economy. By what means could government fulfill a guarantee of a certain volume of consumer spending if it gave such a guarantee? What would be required to enable the economy to be free of monetary impediments at its other vital points? What problems involving price levels, saving and investing, the hoarding of money, and foreign trade and foreign lending (foreign investment) demand special consideration? The remainder of the third section will be concerned with these and closely related questions. No single "solution" will emerge. Rather, a number of possible combinations will be tentatively indicated, with the choice between alternative ways of settling each given question left dependent on the various practical exigencies that must be accorded their due weight in shaping any program of action.

The reader was warned at the outset not to expect a *program* for ending unemployment. A program is indeed imperatively needed, but the aim of this book is the less ambitious one of providing groundwork for such a program. This distinction is stressed again because, if anyone carelessly assumes that specific advice is being given to public officials when actually the argument is concerned with the endeavor to visualize in broad perspective the various economic patterns under which full employment would be assured, misunderstanding will result. Misunderstanding will result if the conclusions are construed as a set of proposals for immediate adoption; it will also result if

the reader overlooks the fact that the proposals to which they might lead are envisaged as having for their objective a condition of guaranteed full employment, and not just some general mitigation of our present economic difficulties.

A permanent bridge cannot be thrown across a river until the nature of the land on the other side of the river has been established. A doctor acquires a familiarity with normal physiology, and not merely with pathology, before he undertakes therapeutic measures to heal the sick. What is attempted here is a preliminary survey of the land across the river. Or again, it might be considered something in the nature of a physiology of normal social health, with normal social health purposely defined as a state of affairs in which all who are willing and able to work can find employment for their energies. The bearing of this kind of investigation on the practical art of constructing social and economic policies should be perfectly obvious, but the first is not a handbook for the second.

Part Three

A Full-Employment Market Economy

Chapter VI

The Factors Governing Employment

THE last chapter dealt in general terms with the principle that production and employment depend, in a market economy, on anticipated consumer demand. The inference was that society could control the volume of employment by underwriting the volume of expenditure in consumer markets. Let us now consider this hypothesis in some detail—the assumptions on which it rests, the qualifications that must be admitted, and the additional requirements for full employment suggested by these qualifications.¹

Since the essence of production for market is that enterprises adjust their outputs on the basis of comparative estimates of their expected money receipts and money costs at various possible levels of production, and since the receipts of the capital-goods industries ultimately depend on the prospects of sale of consumer goods, it is plain that the aggregate amount of employment offered by producers for the market does react to the anticipated volume of consumer spending on the one hand and the prevailing rates of money wages (including salaries, fees, and commis-

1. The effects of (a) consumer credit, (b) public spending for goods and services produced by market enterprise, and (c) international payments are disregarded in this chapter. Chapter vii will consider what allowance must be made for these factors, but for the present the reader is asked to imagine that all transactions are strictly within the country and all final market output is bought by individual consumers for cash.

sions) on the other, tending to vary directly with the former and inversely with the latter.²

That is obviously not the whole story. Even if money-wage levels and anticipated consumer spending both remained constant, it would still be possible for the amount of employment offered to change. This could happen either because of a change in the amount of production (particularly the amount of production in the capital-goods industries) induced by a given amount of consumer spending, or because of a change in the amount of labor required for a given amount of production. We shall be largely concerned in this chapter with these possibilities of variation in the demand for labor independent of variation in anticipated consumption demand or current money-wage rates. For convenience the potentially disturbing variables (the "other things" that may fail to "remain equal" in the real world) will be arranged under six headings: namely, (1) the amount of anticipated *profit* needed to motivate a given amount of production in the system as a whole; (2) the structure of *interest* and *taxes* (i.e., net taxes, or taxes and subsidies), together with the degree of *financial prudence* with which profit may be calculated, as shown by the accounting practices followed in making payments to reserves for depreciation, obsolescence, and various kinds of insurance before considering earnings as net earnings; (3) the way in which the *replacement* of fixed equipment may be spread through time for the system as a whole; (4) the prevailing *anticipations* with regard to the movements of various prices in the near and more distant future; (5) the

2. What counts with the employer of labor is of course the *net* wage-rate cost to him. A payroll tax or payroll subsidy will cause this to differ from the wage rate received by the worker, a point whose significance will be emphasized in chap. viii. But for the present this distinction will be ignored.

“purely psychological” element, or state of business “*confidence*”; and (6) *the technical production data*, or conditions with regard to production techniques, consumer tastes, absolute efficiency of labor, and availability of natural resources.³

However, it seems clear that, *except* as these “other things” fail to remain equal, the amount of consumer spending, the rate of money wages, and the volume of employment offered are tightly meshed together by the dependence of consumer-goods production on consumption demand, the dependence of capital-goods production on consumer-goods production, and the dependence of the demand for labor on the extent of production generally. In production for market, it is axiomatic that the money values of the different factors of production derive by imputation from the money values created in the processes of production and sale. That is, the worth of each type of labor or other factor of production to the employing concern will depend on the factor’s marginal productivity or specific contribution to business revenues (in technical language, its marginal value product, which under natural or artificially simulated conditions of pure competition will also correspond to the value of its marginal product), a quantity that tends to decline as employment of the factor is increased. This is not to say that the employing concern will necessarily evaluate production factors with perfect accuracy; but an attempt to do so is an indispensable part of any attempt to maximize profit or, more broadly, avoid managerial inefficiency. Hence in any given set of circumstances all factors of production, including labor or specific types of labor,

3. The supply of labor is also one of the technical production data, and will be considered subsequently, but for the moment attention is on factors that affect the demand.

have full-employment equilibrium values (or, simply, full-employment values), that is, values which, if they also represented the actually prevailing factor prices, would just induce the hiring of the entire supply on the market.⁴ Whenever the actual price of a particular production factor exceeds its full-employment value, some unemployment of that factor may be expected, since production concerns will tend to cut down on its use and if possible substitute other factors in their production combinations. Conversely, a factor priced below its full-employment value will tend to meet with overbidding. Consequently, to the extent that the actual price is able to move in response to the downward or upward pressure developed by the under- or overbidding, an adjustment toward a position of equilibrium at full employment of that factor would normally be expected, *if anticipated consumer spending itself, or the "other things," did not change in that process of adjustment.*

But the proviso is all-important. The amount of employment offered to a given factor will rise with a decline in its

4. Two comments should be made. In the first place, the demand for each particular factor is influenced in a complicated way by the current prices of other factors that are in some degree potential substitutes, so that a general and at the same time precise mathematical formulation of the full-employment values of all factors simultaneously is perhaps not feasible, cf. Maurice Dobb's article on the Cambridge school of economics, in *Encyclopaedia of the Social Sciences*, V, 369. On the other hand this will not prevent the employing concern from making the necessary attempt to evaluate each factor in turn as well as possible, which is all that matters here. In the second place, exceptional circumstances can perhaps arise in which some factor has a down-sloping supply curve that cuts from left to right of the demand curve as it descends, with the result that, within a certain range, a lowering of the hiring price will increase rather than reduce the amount of unemployment of that factor. This possibility is not of much practical importance, however, and can safely be ignored so far as the present argument is concerned.

price only if this decline in its price does not introduce some new adverse element into the calculations—a decline in purchasing power, or a worsening of the “other things,” or both—sufficient to neutralize its own effect. It is a mistake to try to use the analytical device of a normal demand curve or demand schedule for labor in circumstances in which the demand for products is not independent of the rates at which labor is paid.

Wage Rates and the Volume of Employment

THIS helps to explain why, in the world in which we live, wage cuts are not the cure for unemployment that many persons have supposed. The question, whether a lowering of money-wage rates will or will not cause production and employment to expand, cannot be answered without bringing in further data relating to the economic situation as a whole.⁵ If payrolls and the other components of purchasing power are not expected to decline, and if the wage reduction produces the opinion (favorable, as we shall see, to present as against deferred production) that wage levels will have to move upward again a little later, then an expansion is likely to result. But if, as may very well happen under present-day conditions, the wage reduction is accompanied by a reduction in relief payments, etc. (i.e., if the

5. Keynes goes to the heart of the matter in the following passage: “. . . whilst no one would wish to deny the proposition that a reduction in money-wages *accompanied by the same aggregate effective demand as before* will be associated with an increase in employment, the precise question at issue is whether the reduction in money-wages will or will not be accompanied by the same aggregate effective demand as before measured in money, or, at any rate, by an aggregate effective demand which is not reduced in full proportion to the reduction in money-wages . . .” (*The General Theory*, pp. 259-260; italics in original.)

two phenomena occur together as parallel symptoms of a relative weakening of labor's influence in the direction of affairs), then consumer demand may fall off to such an extent that a contraction of production is more probable. And so forth. In short, the answer to the original question may be either yes or no, depending on circumstances.

By contrast, under conditions in which the volume of consumer spending was determined independently—being established, as we are supposing, by governmental guarantee—only the “other things” could still vary, and a major part of the indeterminateness would therefore be removed right from the outset. Thus the ability to work toward full-employment wage levels by moving total consumer spending upward without changing money-wage rates, or by moving money-wage rates downward without changing total consumer spending, is the first prerequisite for full employment in a market economy.

Since it should be easier to increase consumer spending (that is, assuming the latter to be subject to independent determination) than to obtain through collective bargaining a lowering of money-wage rates, we may suppose that the former method would carry the main load in any situation in which society set out to eliminate a large block of unemployment through an expansion of production for market. The same consideration also suggests that the best long-run price policy, and hence the best policy with respect to the trend of aggregate consumer spending from year to year, would probably not be one that continually required reductions in the money returns to the factors of production, notably reductions in money wages. We shall come back to this point in the next chapter. Our immediate concern, however, is with the other relevant variables, thus far kept in the background.

Necessary Profit, Taxes, Interest, and Other Financial Charges

(1) IN a world of perfect competition the aggregate return to the owners and managers of business assets would equal the net rate of interest on the sums of money actually invested by them, plus a return for actual managerial services at a rate corresponding to what would have to be (and frequently is) paid to salaried managers instead, plus or minus a differential to take care of any dislike or preference for the proprietor's type of risk, or way of life, as such. Some proprietors would be more successful than this, and some less. But if the picture as a whole were any brighter, then competition would tend to be intensified and production expanded by an increase in the number of enterprises or the average scale of operation. And if the prospective risk-wages of labor and capital (the earnings of independent managership and "risk money") failed by and large to come up to this level, enterprise would tend to contract, until the reductions in entrepreneurial money and services and the resulting additions to the supply of money and services offered for hire to others had restored equality between the two types of return. Thus in a perfectly competitive economy a "neutral" profit situation—one in which the motives to expand production in some directions would exactly counterbalance the motives to contract*production in others, so that the aggregate value imputed to the factors of production would not change—would be one in which anticipation pointed to zero excess profit, in the above sense, for the system as a whole.

For a number of reasons the anticipation of zero excess profit may not be the criterion of stability in the real world.

The general explanation is that different producers and industries are likely to respond differently to their individual deviations above or below the normal rate of return. Aside from the fact that methods of calculating profit and loss will not be uniform throughout the economy, which is another matter and will be considered immediately below in another connection, a given amount of anticipated excess profit in one part of the system may cause an expansion either greater or less than the contraction produced by an equivalent prospect of loss (as measured against the normal base line) elsewhere. Where government regulation plays a part, production may for long periods of time be relatively insensitive to the profit and loss position. What is more important, unregulated monopolies can choose not to expand production in spite of continuing excess profits, whereas competitive producers, if losses pile up, will experience difficulty in raising more money and will finally go out of business—although it is true that in agriculture this outcome is frequently postponed for years.

Insofar as a given enterprise is able to maintain consistently a rate of return over and above normal wages of management, interest on capital sums invested, and premiums adjusted to the actual financial risks of that type of business, it must be concluded that proprietorship has there made itself a relatively scarce factor, because of a natural or artificially created impossibility of reproducing that successful enterprise, and that the ordinary laws of competition are not operating. If a number of important industries are in that situation, then it is quite possible that a condition of zero excess profits for the system as a whole will provide too little incentive to keep production from contracting. For such of the monopolistic giants as are in fact obtaining large excess profits may be slow to expand, and,

because the average rate of profit for the many smaller concerns will in the stipulated circumstances be below the normal level, more and more of the latter may go under, pulling the volume of production down with them. The excess profits of the monopolists might of course be used to finance other enterprises, but the point is that, aside from the monopolistic industries themselves, it will be relatively hard in that situation to find fields of enterprise in which money can pay the current rate of interest and an adequate premium for risk.

It follows that an economy containing large elements of unregulated monopoly may have to adjust the relation of consumer spending to production costs in such a way that a considerable and perhaps growing aggregate of positive excess profit emerges, if production is to be kept from contracting. The large size or growth of the profit element in the total national money income is likely in turn to necessitate budget deficits for the maintenance of consumer spending, unless compensatory fiscal measures are applied, which is a further reason why a society intending to maintain full employment must give thought to the problem of monopolistic industries.

But discussion of the questions to which this line of reasoning leads will be deferred. At this point our concern is not specifically with monopolies, nor more generally with the fact that the "neutral" profit situation may at a given time be somewhat above or somewhat below a condition of zero excess profit for the economy as a whole. At present the thing to be noticed is simply that, if the specifications of a "neutral" profit position change from time to time, this can be expected to cause changes in the amount of production and employment even if it has been brought about that wage rates and the volume of consumer spending re-

main constant. Here, therefore, is a factor that cannot be neglected if the volume of employment is to be strictly controlled.

(2) Let us next consider the broad subject of taxes, interest, and financial charges generally. In calculating the prospects of profit, businesses must deduct from their expected receipts not only their operating expenses under the heads of wages, rents, and current expenditures for capital goods (raw materials, transportation service, fuel, repairs, etc.), but also taxes, gross interest, depreciation in the broad sense,⁶ and insurance of various kinds. Stated differently, the values of the factors of production (or amounts that management considers them to be worth at the margin, or quantities of them that management will be disposed to hire at any given set of factor prices) will depend on the extent of the deduction made for these various fixed charges. Consequently, the fact that the latter are not necessarily constant provides us with a second reason why the amount of employment offered may vary even if wage levels on the one hand and the volume of consumer spending on the other remain unchanged.

However, in this case we have a consideration of equal or greater importance in the fact that tax charges, at least, are controlled by government. That means that the net load under this group of headings can be increased or lightened by deliberate social action to the end of *offsetting* variations of other kinds—of which variations in the necessary amount of profit, discussed above, may be one—that will otherwise cause instability in employment.

Taxes may be so levied that they tend to discourage the employment of particular factors of production, as is true,

6. Including obsolescence and, strictly speaking, including depletion in cases where wasting assets such as coal or natural gas are concerned.

for example, of payroll taxes to finance social insurance benefits. Or they may handicap or even completely eliminate certain particular forms of production. Or, in theory at least, they may bear down with equal weight on all enterprises and all factors of production. Hence few generalizations are warranted beyond the obvious one, which is in any case sufficient for the present argument, that a rise in business taxes will tend to discourage production and employment, other things being equal, while a lowering of business taxes will tend to have an encouraging effect. The precise result in any particular case will of course depend on the incidence of the tax in question. All this is equally applicable to any subsidy extended to production, since subsidies are merely taxes in reverse. A payroll subsidy, for example, would tend to encourage the employment of human labor specifically, by making the labor factor artificially cheap to the managers of production.

The effect of the interest load on production and employment is in part like the effect of the tax load. The larger the burden becomes, the less remains for profit, or (viewing the same thing from another angle) the smaller will be the demand for the factors of production consistent with any given amount of profit. The actual gross interest charge is of course distributed in accordance with the amount of money borrowed and the special circumstances of particular loans, such as the estimated risks of default.

The selective or discriminatory impact of interest on production, however, is not fully accounted for by the differences in the actual payments of interest that different producers make. Interest discriminates "vertically." If a positive net rate of interest prevails, it penalizes time specifically—the *entire* time elapsing between the initiation of the first stages of production (such as the extraction of min-

erals from the ground) and the sale of a final consumer good or service to a consumer. That is, if the good or service is not to be sold at a loss, the price to the consumer must include its proportional share of the sum of all the interest charges incurred in all the extracting, processing, transporting, and marketing operations that contributed to it. The man who makes ovens for baking bread is burdened not only by the interest that he himself pays on the sums tied up in his business, but also by the discounting that goes into the establishing of the demand for—and hence the market value of—his ovens; for the *baker* has to earn interest on the sums tied up while his oven is gradually replacing its cost by turning out bread over a period of years. This accounts for the universally recognized phenomenon that the competitive position of relatively roundabout methods of production, as against relatively short and direct methods, is improved by any lowering of the interest rate.

In an ideal theoretical case, with consumer spending constant and with foresight well developed, the other financial charges (for depreciation and the like) here grouped with taxes and interest would be approximately stable or would gradually rise as the economy accumulated fixed equipment. The individual business would be careful to keep the value of its assets unimpaired before distributing any profits,⁷ and for the system as a whole the aggregate amounts currently charged off to cover depreciation, obsolescence, fire risks, etc., would be in fairly close balance

7. "The fundamental principle is that earnings cannot be considered as net earnings, as real earnings, until there is assurance that the economic value of the property of the business, as evidenced by power to earn, has not declined during the period in which the earnings are being made. The capital fund employed in the business must remain intact." Arthur S. Dewing, *Corporation Finance* (The Ronald Press Co., rev. ed., 1931), p. 129.

with the aggregate amounts currently spent and received for replacements.

But uniform accounting methods have yet to be devised and put into practice, and it is certainly not to be expected that the degree of what may broadly be termed the financial prudence of production enterprises—as evidenced by the setting aside of reserves ahead of net profit—will always remain constant. Whatever the extent of these financial charges at any given time, they of course provide some incentive to produce continuously and to keep down idle plant capacity, to the end that the overhead costs may be spread as widely as possible. The point to consider here, however, is that an increase or decrease in financial prudence, like a rise or decline in the aggregate load of business taxes or fixed interest, can readily cause some variation in the amount of production and employment, even supposing wage levels and consumer spending remain constant. In these cases, as in the case of a change in the meaning of “neutrality” in the profit outlook itself, stabilization of jobs will very likely require a temporary expansion or contraction of public employment and, for the longer run, an adjustment of the tax-and-subsidy mechanism or of some other factor affecting the relation between total business receipts and total business costs.

Replacement Timing, Anticipations, and “Confidence”

THE variables thus far discussed may bring about expansion or contraction of production generally—that is, an increase or decrease in the activity of the consumer-goods industries and the capital-goods industries alike—although

changes in the interest *rate* also tend, as noted, to create a redistribution of production as between shorter and longer processes in general. We come now to three possible sources of fluctuation in the demand for, and hence the production of, capital goods specifically⁸—meaning inventories (or working capital and stocks of unsold goods) as well as fixed capital plant.⁹

With consumer spending, money-wage levels, interest, taxes, financial prudence, profit requirements, and the technical production data (techniques, tastes, etc.) all constant, there may still occur certain fluctuations traceable to a “natural” irregularity in the time-scheme for normal replacements, to disturbing anticipations of a logical character, or to vague and from most standpoints illogical variations in “confidence in general.” Let us consider the significance of these three possibilities in turn.

(3) Unevenness in the rate of replacement of durable goods is held by some economists to be practically an inevitable physical phenomenon, like the procession of the seasons, and an important cause of economic instability. It is apparent that, even in circumstances in which business enterprise is under no pressure to alter or prepare to alter the character or scale of its production of consumer goods,

8. As will appear below, the third of these sources of fluctuation, the “confidence” factor, may in theory also affect the production of consumer goods for current consumption. But for practical purposes it appears realistic to group this with the factors affecting capital-goods production.

9. Stocks of final goods accumulated for sale to consumers later on or constructed for rental to consumers over a considerable subsequent period (e.g., houses) are included. Production of durable goods such as houses, when sold outright to consumers, can logically be regarded as consumer-goods production, but it is somewhat more convenient here to consider owned homes as individual investments in capital goods, especially since it is the factor of durability as such to which attention will next be directed. Further consideration will be given to durable consumer goods in the next chapter, in connection with consumer credit.

there may nevertheless be a kind of cyclical fluctuation in the overall volume of production activity, due simply to the fact that the replacement of fixed equipment is proceeding in waves rather than at a steady pace for the economy as a whole. The individual production enterprise replaces a part of its equipment periodically rather than continuously. If the replacements of different enterprises are nicely "staggered," then the system as a whole will show a perfectly even trend. On the other hand, if the replacements of different enterprises tend to be "bunched" at particular times (which may occur because inventions arrive at irregular intervals, or may result from a tendency started in an era of business booms and slumps and carried forward because of a certain uniformity in the life span of durable equipment), then the replacement factor will in itself introduce fluctuations as suggested.

It follows that maintenance of full employment may in certain circumstances call for considerable expansion and contraction of public works of a construction character to fill in the valleys and level off the peaks of normal equipment or construction activity. Hence at the worst there will have to be a good deal of resort to the secondary defense mechanism of emergency planned production on account of this phenomenon. However, it seems likely that, assuming general contractions and expansions of consumer purchasing power to be eliminated, the different replacement waves of varying lengths can be expected shortly to cancel each other of their own accord in large part. Moreover means can be devised, once the problem has been studied statistically, whereby producers for market can co-operate to attack it consciously and thereby hasten its solution. Thus it may well be unnecessary to compensate for this variable with public works to any great extent after all.

(4) The next influence to be isolated is that of anticipations held with regard to the movements of various kinds of prices, since in certain circumstances these anticipations are capable of contracting or expanding the production of capital goods even if the immediate or short-run profit indicators are neutral.

Decisions as to the scale of output in production for market are ordinarily dependent not only on the levels of costs and returns immediately in prospect, but also on the more distant future. Where a manager or trader believes that the costs that must be incurred, in order to realize returns at a later date, are going in the meantime to rise above their present levels, he has a logical reason to expand his current activities; and conversely in the opposite case. Thus production tends to be stimulated to make possible the speculative storing up of all kinds of nonperishable commodities, for further processing or later disposal, whenever business managers and trading specialists anticipate a not-too-distant decline in the value of money—that is, a general rise in price levels, no rise in cost levels as against the selling prices of the same time period being necessary. In addition, regardless of the expected trend of particular selling prices or of price levels in general, a business manager who feels that certain money costs of production, such as wage rates, or interest rates, or taxes, are going to rise in his industry will have a special incentive to proceed at once with operations from which the returns will be spread over an extended period of time. For, even if it means losing money and going into debt for the time being, such action will have the advantage of improving his future competitive position against rivals who fail to be equally farsighted. To borrow Keynesian terminology, in this kind of case the “state of long-term expectation” will

be such as to raise the "schedule of the marginal efficiency of capital" or "investment demand-schedule." On the other hand, an expected decline in certain costs—as a result, for example, of a prospective invention or new technique—will tend to make him hold back rather than saddle himself with what may prove to be high-cost equipment.

This pressure (perhaps heightened by stock-market speculation) exerted by fluctuating anticipations upon the current volume of production for market depends on uncertainty, and consequently on differences of opinion, regarding the future movements of the main variables in the economic system. It is therefore apparent that anything that stabilizes or makes predictable the course of the general price level, the rate of interest, money-wage rates, the rate of introduction of inventions (obsolescence), and so on, should make production much less subject to this kind of disturbing influence.

Thus it turns out that there are secondary as well as more immediate and obvious reasons why anticipated consumer spending is the most important single variable in the employment equation. For, particularly if the trend of consumer spending is plotted for a period of years in advance rather than simply from year to year, one of the most dangerously variable factors in the complex of "other things" will be in large measure restrained by reason of the greatly enhanced predictability of the future course of prices in general. In short, by underwriting the future trend of consumer spending, society will at one stroke not only assure the current consumption demand but also remove a considerable part of the basis for fluctuations in current investment demand. Naturally if the future course of the rate of interest is also brought under social control (a subject to which we return later on), that will reduce the possible instability still further, as will any measures tending to in-

crease advance knowledge of wage trends, the rate at which new processes will be introduced, and so forth.

It will still be true that any remaining impulses deriving from uncertainty as to future price trends will, unless otherwise canceled, necessitate an expansion or contraction of the public-employment program, or some other form of conscious social action, if full employment is to be maintained.

(5) The potential sources of instability in production just discussed have to do with prognostications of a more or less long-run character that are anything but certain to prove correct, although, insofar as they modify current actions, they may to some extent assist in fulfilling themselves. They have, however, this characteristic, that they can be assigned to specific happenings expected to occur somewhere in the realm of prices. Given the prognostications in question, the actions taken in response to them can be shown by ordinary accounting methods to be justified—or, indeed, required. In contrast to such fluctuations, therefore, stand fluctuations motivated by the “purely psychological” factor—by a gain or loss of optimism, animal spirits, or managerial “confidence” that is undifferentiated or illogical, at least by the test just applied to ordinary price anticipations.

The nature of the distinction involved can be made clear by the use of a somewhat absurd hypothesis. Imagine production for market slowing down and coming to a virtual standstill in the face of a guaranteed consumer expenditure of a hundred billion dollars a year. To the familiar visitor from Mars it would be clear that conditions called for a very large volume of economic activity. Yet suppose the managers did not want to produce. Of course the notion is fantastic. Such a conduct of affairs would demonstrably run

counter to the interests of practically everyone in the community—not forgetting management, which usually has an extra personal stake in business turnover. But, for the sake of the argument, let us consider the remedies required under this most extreme hypothesis. First, planned production might be expanded to an enormous extent, producing a partial or even complete transformation of the economy—and one presumably not desired for its own sake, or it would have been engineered previously—into a system of planned production. In the second place, society might take the job of reading the market indicators (of anticipated costs as against anticipated returns) out of the hands of the unaccountably pessimistic managers, placing public employees in charge of the enterprises in question, with instructions to follow the market indicators without pessimistic bias.

But even a relatively moderate loss of “confidence,” if identifiable as such, presents a social or political problem rather than an economic one; for organized society will evidently be at cross-purposes with the managers of production for market, supposing that the former creates conditions in which the latter could operate with a normal degree of business success, and the latter decline to play their expected part. Moreover, a severe contraction of this kind can scarcely occur in a society committed to a policy of full production and the controlled maintenance of purchasing power, since trade unions and the rest of the public can be counted on to bring pressure to bear to influence or remove managers who act in an obviously irrational manner. But if it should occur, it will have to be met in one of these ways, or full employment will have to be abandoned.

The opposite case—a major wave of excessive optimism—would tend in the first instance to reduce frictional un-

employment to subnormal levels. However, since speculative operations over a broad front carry the seeds of a later reaction, society will be well advised to hold any such development in check through bank-loan policy or otherwise.

It is hardly to be expected that purely subjective reactions will ever be without any effect at all on the volume of production operations. At the same time, it must be conceded that to separate the "confidence" factor from the other potential sources of instability is easier in abstract analysis than it is likely to be in practice, assuming that the fluctuations in question do in fact prove to be slight. To begin with, what one person may call illogical pessimism another may defend as a logical reaction to developments that he expects the future to bring forth. It may also be difficult or impossible, in case of a minor tendency to contraction, to distinguish a loss of "confidence" as such from an increase in financial prudence (as manifested by a rise in allowances for depreciation, for example), or, perhaps, to distinguish it from a rise in necessary profit as measured by the other alternatives actually open to entrepreneurial money and brains. Fortunately such distinctions are not of primary importance, since the fluctuations in question will offset each other or have to be countered by government action in the same ways regardless of the terminology used in describing them.

The Volume of Production and the Volume of Employment: Changes in Technology, Wants, and Other Data

(6) THE foregoing discussion has dealt with possible variations in the amount of *production*, and has kept out of

sight the possibility of variations in the amount of *labor required* for a given amount of production. We must now, finally, consider how changes in techniques, resources, and wants—the objective or technical production data—may affect the demand for the labor factor specifically, by acting upon the relative productivity, in a market sense, of labor and other production factors. And with this we must take account of the obvious fact that any change in the labor supply will alter the amount of employment constituting full employment.

Under the heading of technical production data are to be included the state of production technique in the broadest sense—the available machines, devices, methods, skills, processes, and forms of production organization—and the state of consumer tastes or preferences. Whether changes in consumer taste ever occur spontaneously or whether they are always induced either by changes in the distribution of income or by suggestion from the production side, by means of advertising and so on, is not in question here. In any event it is obvious that both tastes and techniques are always changing more or less, year in and year out. Also included among the technical production data are society's primary resources—the size of the labor supply, the absolute efficiency or intensity of application with which labor works (which especially affects the demand for labor when this demand is figured on a time basis), and the natural resources known to be available. These elements too can vary from time to time; so far as natural resources are concerned, change is inevitable.

The variables in question interact in a complicated way and jointly determine how much demand for labor will be included as part of a given demand for factors of production in general. It will probably often be difficult or im-

possible to separate out their effects satisfactorily. For example, in practice an increase in the efficiency or intensity of labor commonly reduces rather than increases the demand for it, because labor is used in combination with machines and the added productivity is imputed to the latter primarily. The speed-up is a familiar case in point; the running of a conveyer belt at a faster rate represents to the managers of production first and foremost an improved technique, i.e., a higher productivity for their capital equipment. Yet, taken by itself, a rise in the absolute or intrinsic efficiency of labor should tend to *raise* the marginal utility or productivity of labor in relation to the marginal utility of land and capital goods, and, where labor is a competing rather than a coöperating factor, so that there is no question of imputing an increase in the quality or speed of the work done to other factors such as machinery, this result may be expected. For instance, ditchdiggers may come to be preferred in borderline cases to steam shovels, or clerical workers to elaborate office equipment such as electric filing machines. The demand for labor will also tend to be increased indirectly if the value of the factor land is reduced through an exhaustion of the supply of known nonreplaceable natural resources proceeding more rapidly than the discovery of new resources. Overlying and ordinarily overshadowing these influences, or their opposites, will be the pressures induced by inventions and changes in taste, which may tip the scales one way or the other so far as concerns the relation between the values imputed to labor and the economic rent of land (for example, by bringing about a greater geographic concentration or a dispersion of industry), and which will in any case affect the demand for labor as compared with the demand for the capital-goods factor.

Even if a change in consumer preference merely transfers a certain dollar demand from one product to another, as it must with aggregate consumer spending held constant, it may easily cause a marked increase or decrease in the demand for labor. In the first place, the two industries in question may have different elasticities of response to changes in demand. This may be a temporary phenomenon, due to a technical difficulty in quickly changing the scale of output in one of them—as where new plant has to be installed before operations can be increased, or where crops, once well started, are likely to be harvested in any case unless the bottom drops out of the market altogether. Or it may be a more or less permanent effect of differences in accounting practice or the degree of monopoly power prevailing in the two lines of production. In the second place, the contracting and the expanding enterprises may differ strikingly in respect to the ratio of labor to other production factors, as is most obviously true when comparison is made between the mechanized mass-production industries and the various service trades.

Finally, the impact of labor-saving inventions is bound to be considerable, since presumably the industrial revolution is by no means over but will continue to increase society's productive efficiency—with the corollary that it will continue to require an increase in total output to maintain any given number of man hours of employment. Cost-saving improvements are not necessarily labor-displacing devices; an improvement in seed, for example, may be primarily land-displacing. However, when a labor-saving device is introduced—for example, the continuous automatic strip mill in the steel industry—this by definition reduces employment per unit of product in the business or

industry in question, and thus calls for expansion of output somewhere if total employment is not to fall off.

The problem raised in such situations is especially critical because of the time-lags they characteristically introduce between disemployment and reemployment. In case of a change in consumer taste, the increase in the demand for one product coincides with or occasions the decline in the demand for another, so that the necessary transfer in employment may be described as a process wherein one industry pulls workers away from the other, or at least draws workers from the common pool of labor even while the other is adding its surplus workers to this pool. Where a labor-saving device is introduced, however, the mechanism of disemployment operates independently—certainly creating opportunities for an increased demand for labor to develop elsewhere, but not automatically assuring that it will develop, so that the mechanism of reemployment may get into action with a good deal of difficulty and delay.

In favorable circumstances, the opening up of new jobs may to be sure be so directly connected with the introduction of the labor-saving device that the two phenomena are to all intents and purposes tied together. For one thing, competition may lead immediately to the widespread introduction of the device, and this may require considerable expansion on the part of some of the producers of equipment—although certainly it may instead merely substitute the production of one type of equipment for production of another type, with conceivably a decline in total equipment production. For another thing, the innovating concern may pass the saving in cost along to consumers, and this, assuming a guaranteed aggregate of consumer expenditure, will enable that concern or others or both to expand production because of the increased command over goods and services resulting from the price reduction.

But these repercussions cannot be taken for granted. It may happen instead that the innovating concern has sufficient monopoly power so that it holds its selling price and its rate of production constant, prevents duplication of the machine or device in question—by controlling the patents, for instance—and simply increases its profits by the amount of the saving in cost that it has effected. It is no solution that these profits are ultimately likely to become part of the stream of consumer spending or the stream of demand for capital goods. For the critical point about the immediate situation is that anticipated profit expansion has not led to expanded production in the concern in question, so that, unless other producers for some reason have decided to expand *their* production on the basis of a (for them) unchanged profit outlook, the system as a whole will be failing to expand in spite of a larger aggregate of prospective profit. In other words, the “neutral” profit position referred to previously will have moved in a way unfavorable to employment.

Thus the introduction of labor-saving devices may come to the same thing as the development of greater monopoly power, whose probable effect in changing the meaning of profit “neutrality” for the whole economy, and thus in decreasing the amount of employment that will result from constant money-wage rates and constant consumer spending, was discussed in an earlier part of this chapter. Or, rather, the introduction of labor-saving devices is one of the primary forms in which increased monopoly and the requirement of increased profit to motivate any given volume of production is likely to appear.¹⁰

10. What happens here might be described as the development of a lag in the rate at which, for the economy as a whole, the value of business assets is imputed back to the primary factors of production, labor and land—or, more strictly, as a rise in rate of innovation multiplied by reimputation time-lag rate.

Evidently, in maintaining full employment in the face of technological displacements of labor, society will have to follow one or both of two courses. It may adjust to its monopolistic industries by assuring a relation between producers' aggregate receipts and costs such as will meet these aggregate profit requirements, profits of monopoly included. Or it may take steps to limit these aggregate profit requirements by limiting the right of its monopolistic industries to operate at the levels yielding them the most immediate profit.

In addition, society has the problem of moving workers physically from one job to another as production assumes new forms. Looking ahead, it seems safe to say that the mechanized, mass-production mills and factories are likely to provide progressively fewer man hours of employment as time goes by. On the other hand, when it comes to rendering personal services, human labor is so much the main component that practically no limitation on employment need be envisaged there except the monetary demand itself. However, even though the aggregate demand for labor may be constant in a statistical sense, with new jobs opening up to offset the disappearance of old jobs, the transfers cannot take place automatically, painlessly, or immediately. For example, if the mechanical cotton picker spirits away the jobs of a million field hands in the South, their relocation in other regions or readjustment to other kinds of work will not take care of itself. It is therefore apparent that society should give thought to increasing the mobility of labor by means of employment exchanges, retraining assistance, and so on, to adapting the technical education of youth to the trends in production insofar as these can be foreseen, and to encouraging promising new forms

of enterprise. In such ways the accepted normal volume of frictional unemployment may gradually be reduced.

The element not yet considered is the labor supply. The question is, how the rate of money wages that will just yield full employment will move with a constant volume of anticipated consumer spending—or, alternatively, how the volume of anticipated consumer spending needs to move in order to hold full-employment wages constant, or in order to fit any preferred trend in full-employment wages. Naturally the answer hinges as much on changes in the supply of labor as it does on net changes in the various components of the demand for labor discussed up to this point.

The supply of labor depends on the size of the population, the percentage of the population in the market for work, the amount of frictional unemployment rated as normal, and—if we are reckoning man hours rather than individual workers—the average number of hours in the working year. The percentage of the population in the market for work in turn reflects such things as age-composition of population, conventional school-leaving ages and retiring ages, the amount of sickness or other incapacity, income distribution (i.e., the financial incentive to accept work on prevailing terms, rather than go on strike or stay out of the labor market permanently), and public opinion about the merits and demerits of not working.

In the United States the supply of labor measured in man hours is perhaps more apt to fall than to rise in the decades just ahead. According to most authorities population totals will be rising rather than declining in this period. However, a progressive shortening of the working week, longer periods of education, and earlier retirement

will quite likely more than offset any growth in population and increase in the percentage of the population of working age wanting to hold jobs. If that proves to be the case, then the net influence from the supply side of the labor market will be exerted in the direction of lifting the average full-employment hourly rates of money wages, although perhaps not the average yearly wage incomes, that are consistent with a constant volume of anticipated consumer spending.

But at all events, regardless of the course that the supply of labor may happen to take, there will always be—for any given development shown by the “other things,” discussed above, affecting the demand for labor—a full-employment money-wage trend as well as a constant-employment money-wage trend consistent with a constant volume of anticipated consumer spending. So also will there be other full-employment and constant-employment wage trends consistent with any rate of increase or decrease that may be applied to guaranteed consumer spending itself.

Summary

THE considerations presented in this chapter elaborate the “first principles” suggested in Chapter V. They lead to the conclusion that, if the “national income insurance” idea were carried into effect—if the volume of consumer spending were underwritten by government, beginning, say, with a volume of consumer spending consistent with full employment at the money-wage rates then prevailing—the problem of maintaining full employment thereafter would be well on its way to solution. They lead to the further conclusion that, for a full solution, allowance would have to be made for a number of secondary variables. Some of the

latter (such as the time-scheme of replacements and the state of anticipations with regard to price movements) would tend to become more nearly constant than they are today as soon as control was achieved over the volume of consumer spending. Some (for example, the "confidence" factor and the power to increase monopoly profits without expanding production) might well prove sufficiently disturbing still to suggest the advisability of special measures to stabilize them at particular times or permanently. The remaining net effects of the secondary variables would have to be met in other ways—such as by adjustment of the tax-and-subsidy mechanism, to change profit prospects, or by variations in the amounts of employment outside of production for market, brought about through the mechanism of a flexible program of public work.

These conclusions assume that economic activity would not be curtailed because of inability on the part of producers to find the money required to finance the production of goods and services for which adequate markets appeared in prospect. Their practical usefulness also presupposes that the volume of consumer spending could actually be brought under social control. However, before we come to the problem of how a guarantee of consumer spending could be fulfilled, and other problems of monetary control closely associated with that, a chapter will be devoted to some underlying issues not yet considered—to begin with, the question of how an appropriate trend of consumer spending to be guaranteed might be calculated.

Chapter VII

Some Guides to Policy

ASSUME that government is guaranteeing or underwriting the volume of consumer spending and thus determining its trend in advance. In addition, assume for the moment without argument that government is perfectly able to fulfill any consumer-spending guarantee it may choose to give. The questions of monetary mechanics raised by the latter assumption will be discussed in the next chapter. For the moment, however, let us keep them in the background in order to clear away some preliminary problems having to do with the considerations likely to determine what kind of consumer-spending trend will in these circumstances be decided upon in the first place.

Price-Level Policy

THE volume of consumer spending might be made to rise, remain constant, or fall. As has already been pointed out, the cardinal requirement for the operation of the imputation principle, and hence for maintenance of employment in the sphere of production for market, is not that consumer spending should remain constant from year to year, but only that its course should be known in advance. Equilibrium is a matter of the relation existing between elements and does not depend upon questions of absolute magnitude.

Since the amount spent in consumer markets will affect

the price level of consumer goods and services directly, and consequently other prices (the wholesale index, for example) indirectly, the decision as to the trend of consumer spending will probably hinge on price-level policy. Should the general commodity price level—and let this mean, for simplicity in discussion, the price level of goods and services sold to consumers—remain constant, or rise, or fall?¹

Society's productive efficiency in terms of consumer goods and services turned out will most likely continue to increase as time goes by, with the added yield attributable to past capital formation remaining in excess of the deduction resulting from current capital formation. The rate of capital formation and the related matter of the rate of interest themselves raise problems that must be considered later on in this chapter. However, deferring those issues and supposing that the observation just made holds good for the output of consumer goods and services produced for sale (and not merely for the total consumption output), a stabilization of consumer spending will involve a gradually falling price level, while a stabilization of the price level will require a gradually rising amount of consumer spending.

It will probably not make a really significant difference, once a condition of full employment has been well estab-

1. It is frequently suggested that the establishment of full employment would be likely to make it difficult to keep price levels under control. That is, it might result in a sharp upward spiral of price inflation, with rising money wages continually leading to an enlarged volume of consumer spending, and the latter, by pushing up the cost of living in money terms, leading to further increases in money wages. For the present this possibility of excessive consumer spending is disposed of, along with the opposite possibility of deficient consumer spending, by the stated assumption that government is able to fulfill any consumer-spending guarantee it may choose to give. The practical problem thus held in abeyance will be taken up in the next chapter.

lished and the volume of consumer spending brought under control, whether price stabilization or stabilization of consumer spending is elected—or some other, not obviously contractionist, alternative, such as stable full-employment wage rates—just so long as the policy chosen is consistently maintained and the volume of consumer spending that, on the basis of current trends, will give effect to that policy is computed and guaranteed in advance. The most important consideration is contained in these provisos.

However, it is perhaps most likely that stabilization of the general price level will be preferred as the long-run policy.

In the first place, the stabilization of consumer spending, if it involves falling prices, is subject to the disadvantage that falling prices as such tend to have a depressing effect on production. As was pointed out in the last chapter, the demand for capital goods of various kinds, including commodity stocks held for resale, tends to be stimulated by the prospect of rising price levels, and held back if the anticipated trend of prices is downward, the businessmen who forecast the change in question being the ones responsible for the expansion or contraction in demand. Superimposed on this is the effect of price-level movements, when they actually do occur, on those who did not forecast them correctly. Those who are subject to heavy fixed interest and amortization charges on long-run investment in plant, or who buy anything supplied monopolistically the price of which is administered in such a way as to be "sticky," will find themselves facing additional difficulties if price levels decline, and the total effect therefore will be a higher mortality rate among business enterprises.

It may be true theoretically that, if prices were all flex-

ible and if everyone knew in advance how the general price level was going to move, its future movements would be adequately discounted, i.e., reflected in all current prices, interest rates and wage rates included. In that case, although the divergence of individual prices from the general trend would still be important both in prospect and in retrospect, causing expansions here and contractions there, neither long-term anticipation nor current realization would exert any net influence one way or the other on the volume of production as a whole. This consideration suggests that a period of experience with control over the volume of consumer spending may make it less important than it is today whether the long-term trend of the price level is constant, upward, or downward. As a practical matter, however, the tendency of a falling price level to depress business enterprise can hardly disappear all at once. Hence, in the interest of avoiding the need to find special stimuli for market enterprise, or the need to force an expansion of planned production, it will probably be wise not to choose this alternative.

The second advantage that price stabilization possesses over stabilization of consumer spending is psychological, in a simple and obvious sense. An increase in society's productive efficiency must of course produce the same increase in total real income under either policy. But in the former case consumers have more money to spend, while in the latter they benefit through price reductions.² A rise in money incomes can perhaps be counted on to give more

2. This is obviously not to say that the existence or nonexistence of price competition among individual producers depends on what happens to the general price level. So far as competition occurs at all in terms of price, the businessman has an incentive to find ways of making his selling prices low in relation to other selling prices, regardless of whether the average price trend is down, or level, or up.

satisfaction than a rise in real incomes alone, quite aside from any possible connection in practice between price policy and income distribution, and even in the absence of an increase in population, which increases the number of individual income shares. (In consequence, price stabilization may also serve to bring home, with greater force than stabilized spending, the social gains derived from the diversion of an adequate amount of energy into capital formation.)

Of greater practical importance than the establishment of conditions in which money incomes in general will gradually rise is the establishment of conditions in which money-wage rates specifically will at least not fall. *Some* money-wage rates will doubtless be subjected to downward pressure in any system not committed to an extreme expansionist policy. On the other hand, for the *average* of these rates to be headed downward will most likely introduce frictions that can and should be avoided. As we saw in the last chapter, the trend of full-employment money-wage rates, taken in relation to any given trend of anticipated consumer spending, depends primarily on changes in labor supply and in the technical production data, particularly tastes and techniques. In the absence of definite advance knowledge as to the relative strengths of these several influences, it cannot of course be predicted what will happen to full-employment wages if the dollar volume of consumer spending is held constant. One might hazard the guess, for the United States in the present generation, that full-employment hourly rates at least would not fall. But the very fact that the general yearly or weekly money-wage level, or even the hourly money-wage level, might conceivably be pushed downward, in conditions of full employment, with consumer spending constant, has

the effect of strengthening the case for a policy guaranteeing a slowly rising volume of consumer spending. Such a policy should, for instance, make it very probable that, when workers displaced by labor-saving devices secure new jobs, they will do so without causing a lowering of money-wage rates anywhere.

The above arguments in support of price stabilization as against stabilization of consumer spending have, naturally, all the more force as against the greater price declines induced by a gradually *falling* volume of consumer spending, should such a policy find any supporters. More important, they could, taken alone, be used to establish the case that a *rising price level* will be the most desirable of all.

There may indeed be advantages in the latter policy under certain conditions. For example, price expansion will probably help to bring about the rapid absorption of a large existing volume of unemployment, and, if strictly controlled so that the point at which prices will level off can be announced in advance and taken into account in all business calculations, this expansion can probably be stopped without causing a production recession. On the other hand, a policy of price stabilization possesses certain other desirable features peculiar to it. Price stabilization makes for even-handed justice between debtors and creditors, discourages speculation, obviates the need to change publicly administered or regulated prices repeatedly to keep them in line with other prices, simplifies reckoning generally, and is also perhaps calculated to require less adjustment of foreign-exchange rates as time goes by to maintain balance in international payments than other price policies—a point to be brought up again later on. And since in the long run it is not clear that the added stimulus of rising prices will be apt to be needed, these additional attributes

of a stable price level seem likely to make the latter the preferred policy ultimately, which brings us back to the conclusion originally stated.

Lest it appear to the reader that this discussion of price levels removes consumer-spending control from the center of the stage, it should be emphasized that that is by no means intended. If, as we are supposing, the trend of consumer spending is guaranteed and controlled *directly*, then society will *indirectly* secure control over the general price level. The former control will be precise, while the latter will be imprecise whenever the official advance estimate of society's changing productivity in terms of consumer goods and services produced for sale itself proves to be inaccurate.

Individually Purchased Consumption Output and Other Final Output

THE problem of estimating what trend in aggregate consumer spending will be most suitable is complicated by any factor affecting the amount of consumer spending calculated to maintain full employment at any given level of money wages, or, viewing the matter from another angle, the full-employment wage level and general price level to be expected to result from any given volume of consumer spending. Three such complicating factors, ignored in the analysis up to this point, have to do with (1) the proportions between consumption output bought by individual consumers and other final output, (2) consumer credit, and (3) foreign investment. Let us consider these aspects of the problem in the order named.

The amount of individual expenditure in consumer mar-

kets required to produce any particular price level depends, not on the size of the total final output, but on the size of that part of the total paid for through expenditure of individual money incomes. An increase in the aggregate output of goods and services can involve a decline in the goods and services marketed in this way, if other output is expanding rapidly.

There may for one thing be an expansion of private self-subsistence production and barter areas³—or of groups using their own unofficial forms of “money.” Again, a decision may be taken to transfer the cost of certain goods or services—municipal transportation, for example, or milk—to the budget and hence to general taxation, the good or service thereupon becoming “free” to the individual consumer. Finally, and this has great immediate importance because of preparations for national defense now getting under way, there may be an increase in the amount of output produced for the use of government or the nation as a unit. In any one of these cases the ordinary consumption price level, and presumably profits, will be higher with any given volume of individual consumer spending than if that change had not occurred.⁴ Under conditions of the

3. This may be referred to as a decline in the “coefficient of money transactions.” See Friedrich A. Hayek, *Prices and Production* (London, George Routledge & Sons, Ltd., 1931), pp. 102–105. The total volume of money transactions is of course also affected by amalgamation and subdivision of businesses and by the extent to which clearinghouse methods are used in settling payments among producers, but in the present context the important thing is the expenditure in consumer markets.

The writings of Ralph Borsodi and his fellow “Distributists” (see, e.g., the magazine *Free America*), as well as the homestead experiments under the same auspices, have served to call attention to the possibility that in many cases the retransfer of production from a conventional market basis to a small-scale subsistence or direct-use basis would not only make for more satisfactory living but also increase efficiency in a narrow cost sense.

4. So far as foreseen, the change might theoretically cause corresponding

opposite sort, the price level will tend to be lower, with probable adverse effects on profits and subsequent production for market.

This is not to say that, in order to prepare for defense today, the United States must curtail its normal forms of production. The argument to that effect, frequently heard from those who advocate cutting ordinary expenditures "to the bone" (the consumer being asked to "make the necessary sacrifices" by giving up new houses, for example, for the sake of having barracks) is highly fallacious in view of the extent to which man power and plant are now unemployed. Indeed today the defense program provides a golden opportunity to achieve full employment by expanding military *and* ordinary forms of production, at one and the same time, because the concerted effort required for defense against external threats makes it all the more obvious that a concerted effort can also be undertaken to build the defenses against sickness and want by producing more goods and services to meet the everyday needs of life. But in a state of full employment the basic conditions of the problem are changed. Then it is clear that an expanded production of "guns" must imply a reduced production of "butter," and, on the other hand, that a slackening off in the "guns" department necessitates an expanded produc-

changes in the values imputed back to the factors of production, in which case price levels would be affected but not profits and profit prospects. If foreseen and not thus imputed, it will tend to affect profit prospects (as well as prices) immediately. If unforeseen, it will affect realized profits (and prices) in the first instance and probably, by sympathy, subsequent profit anticipations. Similarly with changes in consumer credit and foreign investment. The same principles, relative to profit inducement, apply to any changes on the demand side, special mention being made of them just at this point because the three kinds of change now under consideration are viewed as impinging on normal production for market somewhat from "the outside."

tion of "butter" to keep total production and employment from shrinking.

The bearing of this on the problem under discussion should be immediately apparent. Approximate control of the general price level presupposes that the trend of consumer spending, as guaranteed for a certain number of years in advance, will be based on the best available estimates of the probable trend in the volume of output not disposed of through sale to individual consumers as well as on estimates of the rate of expansion of productive efficiency as a whole. In troubled times it may be extremely difficult to forecast the trend in armaments production, etc., satisfactorily. Perhaps the best solution for this difficulty is to have government expressly stipulate that the amounts of consumer spending announced for any year beyond the current year are contingent on the absence of substantial changes in proportions between ordinary marketed consumption output and other final output, and that they will be revised in case such a change occurs. This will not abandon or qualify the general principle of "national income insurance," and at the same time it will remove what may otherwise sometimes prove an important source of undesired price-level changes.⁵

5. The recently discussed Keynes plan for Great Britain, described in his *How to Pay for the War* (Harcourt, Brace & Co., 1940), proposes to "defer" a large volume of consumer income and spending by means of a system of compulsory payments into blocked savings deposits, to be released in installments after the war. This deferment of earnings would act, in conjunction with increased income taxation, to withdraw purchasing power from the market and thus prevent a rise in prices during the war when the production of normal consumption output is reduced, and later the recapture and expenditure of these earnings would tend to prevent a postwar slump from developing out of an excess of peacetime production over currently arising consumer demand. The proposal—which might in practice also serve as a vehicle for reducing extreme inequalities of wealth and in-

Consumer Credit

No special notice has yet been taken of the possibility that consumer cash expenditure may be supplemented or (in effect) reduced by means of transactions that are not on a cash basis. It is necessary now to consider the question of consumer credit.

The custom of granting open-book credit, installment credit, and home-mortgage credit⁶ to consumers, enabling them to exercise purchasing power without at the moment transferring corresponding amounts of circulating medium, has two opposite effects on the monetary circulation. In the first place, it means that a certain fraction of the consumer cash spending for any given period represents the payment of installments on automobiles, household furnishings, and other durable goods bought previously, the liquidation of

come, or on the other hand might be made to have an opposite effect—evidently deals with an important special case coming under the general principle here treated, and recommends a special mechanism applicable to that case. What is suggested here is (a) that any expansion or contraction of “nonmarketed” output, whether related to the military sphere or not, can be treated as one factor bearing on the problem of finding the right amount of consumer spending to induce a full volume of production for market, and (b) that, if the emergence of what is estimated to be the right amount of consumer spending can be aimed at, on special occasions, by means that are somewhat indirect and perhaps not subject to adequate quantitative control, it can also be assured at all times, as a matter of general policy.

6. As pointed out by Rolf Nugent in his recent study for the Russell Sage Foundation (*Consumer Credit and Economic Stability* [1939], p. 37), home-mortgage credit has the peculiarity that *reductions* in the amount outstanding are accomplished primarily by foreclosure rather than by repayments out of current consumer incomes, and hence exercise less depressing effect on the general market for consumer goods than do comparable reductions of other types of consumer credit. In the present discussion this distinction is ignored for the sake of emphasizing the common principles involved.

open-book credits with retail merchants, the settling of old accounts for services, and the paying off of mortgages; in short, this part of expenditure is accounted for, not by goods currently produced and acquired, but by goods produced and acquired in previous periods. And on the other hand, as an offset to this, a part of the output currently sold to consumers is marked as due for payment in later periods.

If the volume of outstanding consumer credit could be counted on to remain constant, the phenomenon itself could be disregarded from the standpoint of the overall quantitative aspect of monetary circulation. The use of time-payment plans would still considerably affect the competitive positions of different producers, but for producers as a whole the current costs not covered by current receipts from consumers would be exactly counterbalanced by the current receipts from consumers against which there would be no corresponding current costs.

On the other hand, an expansion of outstanding consumer credit normally implies that current receipts are to that extent not expected or required to cover current costs. The additional goods to be paid for later, like capital equipment created for use in industry, or houses built to be rented, represent to their producers an additional investment expected to be profitable ultimately. For the moment, however, if the volume of consumer cash spending is not contracted correspondingly, the volume of consumption output sold for cash grows smaller in relation to producers' aggregate cash receipts, because the volume of consumption output sold on credit is growing larger, so that prices tend to rise, the profit situation is somewhat improved, and production expansion is likely to be encouraged. In the opposite case, where the volume of outstand-

ing consumer credit is contracting, a given volume of cash transfers by consumers to producers will sustain a somewhat lower price level for current output than if the volume of discharges of old obligations were not increasing, and production also is likely to be depressed as a result.

It may be that, when more attention is focused on this potentially unstabilizing role of consumer credit in the economy,⁷ steps will be taken to limit its expansion and contraction; for instance, the terms of credit sales of durable consumer goods might be regulated. Moreover, while consumers will certainly continue to require either credits or cash loans from some source—whether from other consumers, from banks and various intermediary financing agencies, from merchants and manufacturers, or from government—at least for emergencies and for obtaining possession of certain of the most expensive items of consumption, it is possible that the amplitude of consumer-credit fluctuations will automatically grow less if conditions are established ending depressions and assuring a general abun-

7. Theoretically, of course, consumer credit might be a *stabilizing* influence, especially in an economy in which, as at present, consumer cash spending is subject to fluctuation, i.e., it might expand (contract) to cushion a contraction (expansion) in cash expenditure. Actually the reverse has been the case in recent American experience, since the small contracyclical movements of what may be called consumers' deficit financing have been swamped by the large movements, conforming to the cycle, of consumers' capital financing or installment credit. Thus Nugent reports that "the outstanding amounts of consumer credit increased between the close of 1923 and the close of 1929 by almost four billion dollars, declined between the close of 1929 and the spring of 1933 by almost as large a sum; and expanded again between the spring of 1933 and the fall of 1937 to above the 1929 peak." Nugent's estimates for aggregate outstanding consumer credit at the close of 1923, 1929, 1933, and 1937 are 4.4, 8.2, 4.8, and 8.3 billions respectively, these figures however including some 15 to 20 per cent of cash loans and excluding home-mortgage credit. (*Consumer Credit and Economic Stability*, pp. 18, 116, 147-148.)

dance of goods. Thus it may grow less under permanent full employment.

Such forecasts, however, are speculative. For present purposes the point to note is that expansions and contractions of consumer credit will to some extent tend to raise and lower respectively the general price level, and also the profitability of production, in a context of given costs and a given aggregate of consumer cash spending for the products of market enterprise. Hence in the first place government in a full-employment market economy will presumably keep itself as fully informed as possible regarding the current volume of outstanding consumer credit, by calling for reports on this subject. And in the second place the trend of consumer spending guaranteed in advance will perhaps be quoted net of changes in consumer credit rather than purely and simply in terms of cash. That is, the consumer spending announced for a particular year might be, for example, 100 billion dollars on the assumption that outstanding consumer credit remains at the same level as in the year preceding, but 99 billions if consumer credit expands by a billion, 101 billions if consumer credit contracts by a billion, and so on. In practice, however, if consumer credit has become relatively well stabilized, it may be considered desirable to dispense with this refinement. For prices will then be little affected, and any disturbing influences upon the volume of production for market can be assimilated with those from other sources already discussed in the preceding chapter, the net result of all of them being counteracted through the tax mechanism or otherwise, with minor expansions and contractions of the public-employment program insofar as these are indicated by the state of the employment index.

Foreign Investment

A THIRD factor not yet taken into account, except in the remarks with which the introductory chapter opened, is foreign lending or, more familiarly, foreign investment. It is convenient to develop the main argument of this book in terms of a national economy regarded as if it were a closed system or self-contained economic world, without either trade or lending relations with other countries. This is satisfactory from the standpoint of analysis because it is a relatively simple matter to modify the statements that apply to a closed system so as to accommodate them to an actual, open system. And it is desirable because, for a country like the United States, the only realistic approach to a stable solution for the unemployment dilemma appears to be the approach by way of domestic economic policy. At the same time the importance of the whole subject of international transactions makes it necessary to devote more space to it than to the points discussed just above.

At the outset it may be well to return to certain general propositions that were set down as landmarks in the Introduction. If the unemployment problem can be solved at home, then all kinds of additional benefits in the form of a higher standard of living can be achieved through wise measures calculated to secure an interchange of products with other countries in accordance with the principle of comparative advantages. On the other hand, if the attempt is made by a given nation to secure full employment itself by means of a shrewd international policy, then, even if by chance that attempt proves successful for the moment, no permanent solution will have been achieved, but only an intensification of international rivalries that may lead in the end as far as war. This of course does not deny that

efforts to coöperate internationally against unemployment are highly desirable, but it would be unfortunate indeed if no country could hope to secure full employment until conditions grow ripe for full international coöperation.

From the standpoint of maintaining stable full employment at home, two major requirements with respect to foreign trade and foreign loans need to be considered. In the first place, the vital part played by monetary policy in the economics of full employment, especially under production for market, makes it clear that an independent domestic monetary policy is essential, that decisions as to the rate of consumer spending, price level, interest rate, and so on must not be dictated by the trend of international payments. In the second place—and here it is a question of the character or composition of the stream of international payments—the home economy must be guarded against such fluctuations in the aggregate incentive offered to home producers as can be occasioned by large net expansions and contractions of foreign markets associated with the foreign investment or lending process in particular.

The first of these requirements implies some mechanism other than domestic monetary policy itself for securing a continuing balance between aggregate out-payments (resulting from merchandise imports, services rendered by foreigners and similar “invisible” items, and the transfer of funds abroad on capital account) and aggregate in-payments (representing receipts for merchandise exports and the other corresponding items). Temporarily a disparity can be covered by credit. If the disparity persists, it can be covered over somewhat longer periods by the export or import of gold—in theory up to the point where gold is no longer physically available, in practice up to the point

where monetary convention makes a country unwilling to part with (or, conceivably, accept) more gold. Since the United States today is the holder of some three fourths of the world's stock of gold, enormous quantities of it could easily, in this exceptional instance, be sent abroad, either to settle a persistently adverse balance of payments, should such a state of affairs develop, or to carry out some program for redistributing gold reserves to other countries. In general, however, except for a major gold-producing country, there are natural or artificial limits to the flow of gold in one direction, so that after a while it is essential that the forces producing such a flow be somehow neutralized. Under the old international gold standard, this was supposed to happen, and for a number of years did happen, "automatically," through the mechanism of changes in relative price levels and relative interest rates. The country sending out gold experienced a shrinkage of circulation that deflated its prices and money incomes and thus stimulated exports and discouraged imports, as well as a rise in interest rates that attracted foreign lenders, while the country receiving gold was subjected to the opposite effects, so that the net result was a correction and very likely a reversal of the original disparity in payments. Quite aside, however, from the question whether it would be possible for such a mechanism to operate without jamming in future, the attempt to make it operate would squarely conflict with the policy of regulating the monetary circulation in the interests of domestic full employment. Hence the essential balance between in-payments and out-payments has to be assured by other devices.

Generally speaking, two types of solution are possible: (1) some form or other of rationing of exchange, and (2) recognition of the principle of unlimited flexibility in ex-

change rates, as opposed to flexibility limited to the immediate vicinity of fixed mint pars of exchange. The former arrangement (exchange rationing) chokes off any tendency for imports, etc., to exceed or fall short of exports, etc., in value by preventing the unbalancing transactions from taking place. On the other hand flexible exchange rates keep in-payments and out-payments in line through the effect on international transactions of changes in the value of domestic money in terms of foreign money; an excess of out-payments, for example, raises the price of foreign exchange until the discouraging effect of this on importers and others with payments to make abroad and the encouragement given to exporters and other recipients of foreign payments restores a condition of balance.

Both types of solution are familiar in current practice. It is clear that the former is more or less in accord with the spirit of production planning, while the latter, since it secures its effect directly by way of individual reactions to buying and selling prices, is closer to the philosophy of production for market. The first precept of a full-employment market economy with respect to its foreign transactions will therefore presumably be that pars of exchange, and the value of the domestic monetary unit in terms of gold, shall be variable rather than fixed.

It will still have to be recognized, however, that movements of exchange rates entail certain definite disadvantages. If currency depreciation is interpreted abroad as an act of economic aggression—that is, as a device designed to give special advantages to exporters rather than merely correct an inequitable existing disadvantage—it will produce international friction and, very likely, retaliation. If exchange rates are perpetually moving, not merely a point or two but over a wider range, so much uncertainty is in-

troduced into the calculations of exporters and importers that foreign trade may well be seriously discouraged. The mere possibility of such fluctuations may also result in large short-term capital movements based purely on speculation as to future changes in rates, which in turn may considerably accentuate the exchange instability.

It is therefore a foregone conclusion that, while a full-employment market economy will vary the exchange value of its currency without hesitation when this proves necessary to correct a deeply rooted tendency for out-payments to exceed or fall short of in-payments at the existing valuation, it will also take steps to avoid needless exchange fluctuations. Hypothetically it may be assumed that every effort will be made to establish a currency valuation that will thereafter secure a balance of transactions, thus tending to maintain itself; that gold will be used, at least in the near future, as a balancing item to settle temporary disequilibria; that the monetary authorities will carry on active dealings in foreign exchange (with or without a special stabilization fund) to prevent short-period fluctuations; that, over and beyond the kind of reverse rationing of exchange represented by such marginal dealings, government will quite likely place actual restrictions on certain types of private transactions—for example, speculative short-term lending; and that, if and when it becomes necessary to establish a new currency valuation, it will be considered an advantage if this can be done by international agreement according to a well-understood formula precluding the possibility of currency wars.

As previously mentioned, the desirability of avoiding unnecessary movements of exchange rates will presumably also be one of the factors taken into account in the framing of domestic monetary policy. Home requirements will still

be paramount. But it will be sensible to have domestic price-level policy, as reflected in the decision taken with regard to the trend of consumer spending, geared to the expected trend of world prices, provided in the first place that the latter trend seems reasonably clear, and in the second place that to follow it involves no appreciable sacrifice. For example, it was suggested above that the choice between a constant and a slowly falling price level may in certain circumstances be less a matter of indifference on purely domestic grounds than the choice between a constant and a slowly rising price level. In that case, it may be politic to elect a constant price level if world prices are expected to be constant, and at the same time impolitic to choose a falling price level if world prices are expected to decline.

As far as concerns domestic interest-rate policy, on the other hand, it seems rather unlikely that a country like the United States will be disposed to wait on the rest of the world, supposing the United States alone establishes a full-employment economy. As will be pointed out below, there may well be more at stake in the decision about the rate of interest than in the decision about the price level at which transactions are to be effected. But if an independent national interest-rate policy is followed, this strengthens the probability that special measures will be needed to deal with the problems of foreign lending or foreign investment—long-term (i.e., the acquisition, transfer, and retirement of securities) as well as short-term.

If no net foreign lending, positive or negative, is taking place, then in a condition of balance between in-payments and out-payments the dollar costs of Americans for goods and services imported—their costs on current account—will clearly be just equal to their dollar receipts for goods

and services exported. In other words, sales to foreigners will provide an outside market exactly as large as the portion of the home market given up to foreigners, so that on the whole the existence of foreign transactions will furnish home producers no special motive either to expand or to contract. It is true that the dollar costs and receipts of home producers—as distinguished from those of home producers and consumers taken together—arising directly from the purchase and sale of foreign exchange will not be automatically equated except by coincidence. For the amounts paid for foreign exchange by consumers (Americans traveling abroad for pleasure, sending gifts to foreigners, and so on) will normally differ somewhat from the offsetting amounts received in the first instance by consumers (such as interest and dividends on their foreign investments, the dollars acquired by foreign tourists in the United States, etc.). But this is a minor consideration and can safely be disregarded.⁸

Foreign lending, on the other hand, has important special implications of its own. Since a net movement of capital funds one way or the other necessarily means, in a condition of balance between in-payments and out-payments in the aggregate, that an equivalent excess of payments for merchandise and services is moving in the opposite direction, it is clear that markets for goods and services produced at home will tend to be expanded by foreign loans and contracted by borrowings or repayments from abroad. A favorable trade balance made possible by loans to foreigners gives home producers a larger aggregate dollar

8. Strictly speaking its implication is that any small adjustment of the volume of consumer spending assignable to the need to neutralize an addition to or subtraction from consumer purchasing power arising thus out of foreign exchange as such calls for some kind of equivalent production subsidy or tax if it is desired to hold the scales of positive and negative inducement to production exactly even.

market for their output, with a given amount of domestic consumer spending, or in other words requires a smaller fraction of a given output to be sold at home against a given amount of domestic consumer spending than is the case where imports are as large as exports. In a corresponding manner the loss of export markets, not offset by an equivalent reduction of imports, resulting from a cessation of this lending will eliminate the special advantage to home producers, and the subsequent repayment of the loans will reverse it.

In its effect on price levels and on the stimulus to production associated with any given volume of domestic consumer cash spending, foreign lending can thus be likened to an expansion of consumer credit. Where it takes the form of a direct investment (such as the setting up of a foreign branch factory by a home company), or of a loan tied to the export of specific goods, or of any kind of lending abroad by home producers, it is clear that producers are making what they estimate to be a profitable investment. Hence in these circumstances, as in the case of consumer credit voluntarily granted for the sake of promoting sales, the expenditures for foreign exchange in question are not reckoned as current costs. Only if the loans are made by individual consumers, and this is permitted to reduce domestic consumer expenditure, may home production not be stimulated. That is, in a system in which aggregate consumer spending is not controlled, the buying of a large volume of foreign securities by consumers will probably contract home markets somewhat and may contract them as much as it expands export markets. With aggregate consumer spending held at a prearranged level, however, home producers will experience a stimulus from foreign lending by home consumers just as much as from equiva-

lent foreign loans made by themselves, unless the addition to consumer spending created to offset its contraction on account of the required purchase of foreign exchange by consumers is financed by a corresponding net increase in taxes on production.

It follows that the existence of foreign lending, while it need not conflict with the maintenance of control over the volume of home employment, will necessitate the adoption of compensatory measures such as are not required by foreign transactions on current account. The net amount of all lending may reasonably be expected to be negative in a young country requiring foreign assistance for the development of its resources, positive as the country matures to the point of lending to other countries, and finally again negative as these loans in turn are paid off. Like the anticipated trend in the proportions between consumption output sold to individual consumers and other final output, and perhaps also in the volume of consumer credit outstanding, the anticipated trend in foreign lending can be a special factor taken into account in calculating the trend of consumer spending to be established by guarantee. Or, if the prospects seem too uncertain, the amounts guaranteed can be made subject to revision for this as for the other factors. Any effects from capital movements not allowed for by one procedure or the other can be compensated in the ways already referred to in connection with unexpected domestic fluctuations of all kinds—by tax revisions or other measures changing the relation between producers' receipts and costs, accompanied by expansions and contractions of public employment as may be necessary.

Practically speaking, however, some direct public regulation of foreign lending will quite likely materialize, for other reasons. Speculative short-term capital movements

may necessitate unduly large direct dealings in foreign exchange by the monetary authorities to hold the exchanges steady, and may also conceivably lose the stabilization account more money than may be held warranted for the sake of preserving this privilege to speculate. If low interest rates at home cause a heavy migration of long-term funds in search of a higher return in other countries, this also may entail several undesirable results.

For one thing, it may cause the exchange value of the currency to decline, producing a worsening of the terms of trade (or lowering of the return in actual goods and services obtained for goods and services exported) to the point where the added interest gain to the lending individuals is more than offset, at least prior to the repayment of the principal of the loans, by the social loss through selling cheap and buying dear.

For another thing, the political effects may be unfortunate. The process of lending abroad presumably implies its own cessation and the eventual repayment of the loans—and hence a future transition from a favorable to an unfavorable trade balance. As noted above, to an economy prepared to vary its exchange rates and to take capital movements into account in planning the trend of domestic consumer spending and otherwise, the transfer problem, or problem of making or accepting the required foreign payments, should be perfectly soluble at every stage of this long cycle. Repayment through an enlargement of imports will not depress home production if consumer spending at home is deliberately geared to a corresponding degree of expansion. But this does not eliminate the risk that, in the process of assuring collection of interest and principal payments on the loans in question, the lending country may establish control over the borrowing country to an extent

incompatible with the best interests or even the independence of the latter. This again suggests that large-scale foreign lending should not be undertaken in haphazard fashion, but rather should depend on considered national policy—that is, unless or until it is possible to organize it on the basis of constructive consultation and agreement among nations generally.

Capital Formation and Interest-Rate Policy

WHEN employment is allocated to capital formation or, as some might prefer to say, to investment—that is, to the production (maintenance, replacement, or expansion) of capital goods and services⁹—the possibility of creating consumer goods and services is increased for the future but reduced for the time being. The social importance of the choice as to the extent to which current real income shall be curtailed for the sake of raising the standard of living later on is self-evident. Clearly it is an integral part of any program intended to maximize welfare or satisfactions to see to it that the rate of capital formation is subject to the

9. The choice of terms in such a discussion as this is a difficult one, since usage varies widely. Let us refer to the physical process of producing capital goods (inventories in the broad sense as well as fixed equipment) as "capital formation" (or sometimes, with special emphasis on the total, "gross capital formation"), to the nonexpenditure of money receipts as "saving," to the holding of money in currency or demand deposits as "hoarding," and to the use of money savings to buy bonds, stocks, savings accounts, insurance policies, etc., as the "investing" of these savings. Occasionally it is useful to substitute "rate of social saving" for "rate of capital formation," giving "saving" in this connection a real instead of a monetary significance. "Net capital formation" involves some difficulty, since it may be taken to mean the net addition either to the volume or to the value of capital goods, however, the point at issue is not of importance for the problems considered in this book. Durable final goods such as houses are here regarded as capital goods; cf. above, p. 154 and n. 9.

control of the general public over the course of the years. Moreover, temporary fluctuations in this rate will tend to upset the established forms of production, and to cause fluctuations in prices and profits by expanding and contracting current consumption output, so that it is desirable that such variations be minimized.

One of the factors controlling the rate of capital formation is the rate of interest, which at once suggests the desirability of having the rate of interest more or less stable (presupposing that mechanisms other than induced interest-rate fluctuations are available for controlling the volume of economic activity) and at the same time responsive to public opinion. This conclusion is very much reinforced when it is recognized that fluctuations and anticipated fluctuations in the rate of interest can cause difficulties by way of their effect on the extent of hoarding within the economic system, that is, their effect on the amount of money held, either in demand deposits or in currency. It may also be recalled from the last chapter that speculative anticipations of price changes, interest changes among them, can directly affect the volume of capital-goods production—a further argument for having the rate of interest controlled and planned in advance.

Evidently the rate of capital formation, the rate of interest, and the quantity of money are connected through a complex web of relationships, and it is necessary to attempt to disentangle the main strands.

Within the sphere of production for market proper, the rate of capital formation tends to vary inversely with the rate of interest, since, as pointed out in Chapter VI, the competitive position of long or roundabout production processes is improved if the penalty for consuming time is lightened. For any given interest rate, if the technical pro-

duction data and other conditions of the problem never changed, all capital goods would have determinate values, demand and supply continuing to intersect at the same point, so that no inducement would exist either to expand or to contract the stock of capital goods in use. If this stock were consumed at a constant rate (fixed equipment wearing out gradually; raw materials, fuel, etc., making their contribution and disappearing all at once), then presumably the rate of production of capital goods needed to make good this loss through use would be stable also. In short, gross capital formation would be constant at a rate just sufficient to make net capital formation equal to zero. At any lower rate of interest, gross capital formation would be larger; at any higher rate, it would be smaller; with a falling rate, it would rise, net capital formation becoming positive; with a rising rate, it would fall, net capital formation becoming negative.

In practice this dependence of the rate of capital formation on the rate of interest will appear as a tendency only, being modified and sometimes obscured by the operation of several other dynamic factors, particularly speculative anticipations regarding the movements of various kinds of prices, as previously noted, and changes in the rate of physical destruction of capital goods and the rate at which invention renders existing equipment obsolete. Under conditions like those prevailing in nineteenth-century America, such additional factors as population growth and the opening up of new territory obviously are critical considerations also, and so is the discovery of new natural resources, a factor rather similar to invention.

Any sudden destruction of considerable quantities of capital goods—as by war, fire, flood, earthquake, or some other catastrophe—creates a demand for replacements, and

the ensuing reconstruction constitutes a sudden increase in capital formation. The obsolescence factor operates in a somewhat more complicated manner. With any given rate of introduction of new inventions, gross capital formation has no particular reason to fluctuate, since the regular normal loss or consumption of capital equipment includes its obsolescence as well as its physical depreciation, and its "normal replacement" implies not merely the periodic substitution of new machinery, etc., for old as the latter wears out, but also the substitution of more efficient types of machinery, etc., for old models. The more rapid the pace of innovation, the higher the rate of obsolescence on the one hand and of gross capital formation on the other (except, in the latter case, as innovation involves alterations in procedure not⁹ associated with corresponding alterations in physical equipment, as may occur in connection with simplifying or economizing inventions). Gross capital formation tends to remain constant, however, and net capital formation at zero, so long as the pace of innovation itself does not change. On the other hand, if such a change of pace occurs—perhaps as the result of an unusually large number of disconnected inventions turning up at about the same time, or because a major technological advance produces an important new industry, such as automobiles or radio—capital formation will normally be changing in the same direction, even though the rate of interest is constant. Whether the new rate of capital formation maintains itself thereafter or whether a reversion to the old rate occurs, or a shift to some third rate, will then depend on the subsequent course of invention. A sudden and temporary burst of invention may also bring in its wake, in later years, something of a wavelike expansion and contraction of the aggregate volume of replacement construction.

For several reasons, therefore, in spite of a steady interest rate, the rate of capital formation within the sphere of production for market proper may well be uneven. But the rate of interest is still a decisive factor.

The rate of saving for the economy as a whole will depend not only on the saving occurring in the market sector, but also on that resulting from the expenditure of public revenues for capital formation within the sphere of planned production. As noted elsewhere, the simplest offset to a temporary contraction or expansion of construction in the sphere of market enterprise will be a corresponding expansion or contraction of the construction projects in the flexible public-works program. Aside from that, however, the normal or permanent activities in the planned production category can be divided in various different proportions as between capital formation and the creation of goods and services for current consumption.

It follows that, granting the desirability of having the rate of social saving or capital formation conform to the public's desire to enlarge future consumption at the expense of immediate consumption, there may still be difference of opinion as to how this result can best be achieved. For, by bringing pressure to bear on the rate of interest, collective action can influence the interest-rate verdict arrived at through the market, and, by placing special emphasis on immediate or alternatively on deferred consumption in the sphere of planned production, it can amend the results of that verdict.

In part the problem of finding the optimum rate of social saving is merely a special aspect of the problem of making consumer sovereignty effective. Left to itself, the atomistic action of the loan market will tend to yield a rate of interest reflecting the views of different persons—that

is, their views as to the size of the return required to make it worth while to lend money rather than spend or hoard it—not equally or anywhere near equally, but in proportion to the sums of money disposed of by them respectively.¹⁰ To the extent that political democracy is real and effective, the collective verdict as to the proper rate of social saving will register the views of different persons equally. There is little doubt that the inequality factor at present decreases the amount of money spent on current consumption and increases the amount saved. On the other hand, in the absence of inequality, collective judgment might favor a higher rate of capital formation than atomistic individual judgments. Individuals making separate decisions might be more impatient for immediate consumption or more impressed with the need to hold ready cash or both than the same individuals, or their representatives, met to consider the question from the standpoint of the long-run interests of society as a whole. At least it appears that individuals separately are less apt to conserve the country's natural resources, and yet more apt to keep them out

10. It is estimated that in 1935-36 the upper income third of the nation's 39 million families and single individuals (incomes of \$1,450 and over) had aggregate money savings of 7.4 billion dollars, the middle third (incomes of \$780 to \$1,450) negative savings of 250 millions, and the lower third (incomes under \$780) negative savings of 1.2 billions. (Negative savings, so called, represent excess of current consumption, plus gifts and personal taxes, over current income.) The striking inequality of opportunity to participate in the loan market revealed by these figures is further emphasized by a breakdown of the top third. The highest tenth (incomes of \$2,600 and over) saved 6.3 billions, or nearly half as much as was spent on current consumption by this group. The highest one half of 1 per cent (incomes of \$15,000 and over) saved 2.8 billions and spent only 2.2 billions. National Resources Committee, *Consumer Expenditures in the United States* (U. S. Government Printing Office, 1939), pp. 48, 51. It is to be observed that these estimates deal only with consumers' money savings, omitting those of business corporations.

of use altogether, than they are when they consult together and formulate a general policy, and the analogy is suggestive.

But it must be noted that in one peculiarly vital respect the case for atomistic determination of the rate of interest fails to compare with the case for atomistic expression of ordinary consumption preferences. The rate of interest is never decided by the marginal time preference and marginal willingness not to hoard of individual *consumers*. A situation can be imagined in the abstract in which the desire of certain consumers to borrow money in order to spend in excess of their current money incomes (for example, to purchase homes and various other expensive durable goods) would be balanced in the loan market simply against the desire of other consumers to reduce current consumption for the sake of having more to spend later on. Assuming no tendency to increase or decrease the hoarding of money as such, the rate of interest that cleared this loan market could be considered a trustworthy index of the population's time preference; and the rate of interest thus discovered might then be applied to production, serving to regulate the rate of capital formation. But this would fail to be satisfactory even in theory unless production currently distributed to consumers all its money receipts—that is, not only all profits, but also those earnings customarily allocated to reserves for depreciation, etc.—thus inviting consumers to choose a negative net rate of capital formation if so disposed. The complete impracticality of such an arrangement throws doubt on the possibility of ever securing through the market a reliable measure of time preference, or even of time preference combined with consumers' desires to hold cash. In practice, of course, monetary saving in a modern economy is to a very large extent a semi-

automatic process emerging from the routine operations of business corporations in setting aside depreciation reserves and withholding net profits.¹¹ Furthermore, insofar as the individual consumer does participate in the process, his money savings for the most part are funneled through giant financial institutions—corporate and individual trustees, life-insurance companies, commercial banks (as recipients of time deposits), mutual savings banks, building and loan associations, and so on—before they again are made available to production.¹² Hence the rate of interest tends to reflect what all holders of money—not only consumers but also banks and other business units, which can have no time preference in any meaningful sense of the term—will take for giving someone else permission to use it. And since it can hardly be seriously claimed that a rate of interest thus determined (and potentially so unstable) is capable of expressing the public's real desires in the mat-

11. The testimony before the Temporary National Economic Committee of such business leaders as Edward R. Stettinius, Jr, Owen D. Young, Alfred P. Sloan, and Frederick B. Rentschler brought out in striking fashion the extent to which the practice of setting aside ample depreciation allowances has freed some of the largest corporations from the necessity of borrowing new savings in the market for purposes of plant replacement or even for plant expansion. Oscar L. Altman of the Securities and Exchange Commission presented aggregate figures, according to which all nonfinancial business enterprises spent in the period 1923-29 for plant construction, machinery, and equipment an average of 8.5 billions a year, and had available from internal sources (depreciation, depletion, and retained net profits) an average of 6.4 billions a year; some expenditures were charged directly to income, and the capital markets in this period never contributed as much as 2 billions a year toward the financing of this plant construction, etc. For 1922-39 the average annual figure for construction, etc., seems to have been 6.5 billions, against an average of 4.6 billions available internally. See *Investigation of Concentration of Economic Power: Hearings before the Temporary National Economic Committee, Congress of the United States, 76th Congress, 1st Session (pursuant to Public Resolution No. 113, 75th Congress)*, Part 9, Savings and Investment; held May 16-26, 1939.

12. See the testimony of Donald H. Davenport of the S.E.C., *ibid.*

ter of saving, the uncontrolled self-regulation of the rate of interest has little to recommend it on that score.

That there are other objections to it becomes clear when account is taken of the relation between the rate of interest and the hoarding or holding of money. This is evidently a matter of the first importance for a society proposing to maintain full employment by controlling the actual circulation of money. For, if an excess of money piles up anywhere, it raises questions both as to how the circulation is to be kept from contracting while that process is going on and also as to how it is to be safeguarded against undue expansion if the money is suddenly released at some later date.

The quantity of money or volume of cash balances (demand deposits and currency) is not something determined by nature or by arbitrary fiat. Rather it reflects the needs for retaining cash that comes to hand, commonly spoken of as the liquidity requirements, of producers¹³ and consumers as these needs are interpreted by themselves. The demand for money as such is not limitless, as might be casually supposed, the reason being that there are many other forms in which the individual or business unit can hold wealth—and will prefer to hold it, once liquidity requirements are satisfied. Nor is the supply of money fixed. This subject is too large for discussion here, quite aside from its terminological difficulties,¹⁴ although certain aspects of it will have a prominent place in the next chapter. For present purposes it is sufficient to recall that, within the limits imposed by its reserve requirements,¹⁵ which in turn can be modified, the

13. Including government agencies and banks.

14. Cf. n. 1 on p. 117 above.

15. Each member bank is at present required, depending on the size of the town or city in which it is located, to keep a reserve equivalent to 12, 17½, or 22¾ per cent of its net demand deposits with its Federal Reserve

banking system as a whole has the power to expand the quantity of money outstanding by increasing its loans (usually taken in the form of demand deposits), and that the banks can also liquidate deposits and thus contract the quantity of money by failing to make new loans as fast as old loans are repaid. In other words, the supply of money is decidedly flexible,¹⁶ so that it is necessary to focus attention first of all on the demand.

There are several reasons why individuals and business units may wish to hold more money at one time than at another, even in an economy with continuous full employment. To begin with, liquidity requirements will tend to vary directly with the dollar volume of transactions, the ratio commonly referred to as "velocity" remaining more or less constant. Thus, in the first place, the policy settled upon with respect to the price level, and the proportion between consumption output sold to individual consumers and other final output, will be important in this connection. For example, supposing it is decided to have the volume of consumer spending rise 3 per cent each year, it will be natural, other things being equal, for cash balances to rise

bank, besides a 5 per cent reserve against time deposits. Federal Reserve banks in turn must normally keep reserves of at least 35 per cent in lawful money against their deposit liabilities, and the minimum gold-certificate backing for their Federal Reserve notes outstanding is 40 per cent, the remainder of the 100 per cent note cover taking the form of eligible commercial paper or (since 1932) government obligations. The nation's actual gold has since 1934 been held by the Federal Government. In that year Congress also declared it to be the policy of the United States to keep one fourth of its monetary stocks in silver.

16. This has probably always been the case. For example, when the precious metals circulated as money, an excess of money could be disposed of by melting down coins into bullion. Under the so-called 100 per cent reserve plan, money could still be created or canceled, but in this case, so far as concerns demand deposits and currency, only by the central monetary authority acting under its rules.

at about the same rate. On the other hand, an extension of the process of integration or vertical combination in production will tend to reduce the need for money in the economy as a whole, since it will cut down the dollar volume of interproducer transactions. Moreover, without any change in the transactions factor, liquidity requirements may be affected by a horizontal consolidation or subdivision of business units or a change in the size of the population or number of families in the population (the change in the number of separate balances failing to be exactly offset by the opposite change in their average size), or by altered habits as to times of receiving and disbursing money (for instance, a widespread shift from weekly to biweekly wage payments), and so on.¹⁷

These possibilities are rather self-evident. A less obvious, but in the short run an extremely important, factor in the problem is the one that particularly concerns us here, namely, the rate of interest. This must be considered both from the standpoint of the influence exerted by the actually prevailing rate as such and also from the standpoint of the effect produced by speculative anticipations with respect to the trend of the rate in future.

Aside from the latter anticipations, liquidity requirements will vary inversely with the current rate of interest, other things being equal. Just as the average length of processes of production, and hence the aggregate volume and value of the capital goods used in production, will tend to be greater with a low rate of interest than with a high rate, so also will the amount of money held in preference to lending it be greater in the former case, since the in-

17. Income distribution has an important bearing on the question today, since it is certainly not through choice that individual and family cash balances approach zero for large sections of the population.

centive to forego the advantages of liquidity for the sake of the interest obtainable on loans will be less. In short, a producer will feel less inducement to lend money or pay off debt instead of acquiring and operating with capital assets or holding money (or, perhaps better, operating with capital assets *including* money), while any consumer rich enough to be appreciably affected in his action by this consideration will also tend to buy more durable goods and hold more idle cash in preference to buying bonds and the like. Land too will be more in demand, since the same rent yield will seem more attractive, and land values will be higher in consequence.

While this is strictly speaking a matter of what may be expected to happen under alternative conditions at any given time, and therefore does not preclude the possibility that in the course of time a lower rate of interest may come to have the same effect upon the preference for liquidity as was formerly exerted by a higher rate, it undoubtedly points to a problem that will arise if any attempt is made to lower the long-term rate of interest to zero or thereabouts. Quite aside from possible uncertainty as to whether the rate may not rise again later on—that is, even supposing that a long-run national policy has been definitely decided upon and is unanimously expected to be carried out as announced—the incentive to lend money is likely to grow smaller and smaller as the rate of interest falls. If the latter should actually reach zero, there would be no incentive whatever to get rid of money, assuming no carrying costs of any kind associated with the holding of idle balances, except the motive to spend it for goods and services, including business assets and also land. (Indeed land values would probably rise enormously, unless the increment due to interest-rate policy was recaptured from land-

owners by taxation.) Hence it might happen that producers would build up their balances as fast as they received money for products sold, and consumers with incomes too large to be conveniently spent might do likewise. In other words, the preference for liquidity might become absolute or infinite—just as it has been known on historic occasions, as in Germany in 1923, when runaway inflation precipitated a “flight” from money, to approach the other extreme of zero. Maintenance of a predetermined rate of consumer spending would then be possible only if government continually created new issues of money. Or, with a zero or very low rate of interest, government might avoid that necessity by creating carrying costs for money—that is, by penalizing the holding of idle balances—or by making the lending of unspent money obligatory. This subject will be considered further in the next chapter.

It has already been emphasized that those producers for market who anticipate a rise in the costs that need to be incurred in order to realize returns at a later date have a logical reason to expand their current activities. In this respect the effect of an anticipated rise in the rate of interest will resemble the effect of an anticipated rise in some other cost element (money-wage rates, for instance), tending to enlarge the current demand for capital goods, and hence, other things being equal, the aggregate volume of production activity.

There is also a similarity between the wasteful effects of wrong estimates about the future course of the rate of interest and wrong forecasts about other cost elements. If a man equips a factory with standard machinery, and a better process is promptly invented that cuts the cost of production in half but requires an entirely different set of machines, it will become evident that the first installation was

socially wasteful—although unavoidably so—regardless of whether the second process is adopted or suppressed. Consider now a different illustration. If the current short-term rate is 4 per cent and that rate is also expected to prevail ten years later, the cost of long-term borrowing for construction (say, for simplicity, 4 per cent) will be such as to prompt the erection of relatively cheap and impermanent structures. But suppose that ten years later the short-term rate is only 1 per cent. It will then be apparent that these buildings are a mistake, and one that would have been avoided had the course of the rate of interest been correctly foreseen. For in that case the cost of long-term borrowing would have been lower (say $2\frac{1}{2}$ per cent) and more permanent structures would have been put up in the first place. This mistake, moreover, will probably have been very widely duplicated throughout the economy, being thus both more wasteful and—assuming the possibility of controlling the rate of interest is not an illusion—more readily avoidable than the aforementioned error due to unforeseen obsolescence.

But now it must be observed that anticipated changes in the rate of interest are capable of producing, further, a special effect of their own, operating by way of the desire to hold money balances. As against the amount of liquidity desired in any given situation in which the prevailing rate of interest is confidently expected to continue into the future, or in which the trend of the interest rate is known with certainty in advance and hence completely discounted, a larger amount of liquidity will tend to be desired if there is a speculative anticipation of a rise in the interest rate, and a smaller amount in the opposite case. For if a rise is foreseen, the attractions of the interest return obtainable for lending money will be diminished by the prospect that

the bonds or other debts purchased will lose a part of their market value as the result of the interest-rate rise in question—in which case, the net effect of lending may be a financial loss to the lender rather than a financial gain. The man who has an opportunity to buy a bond yielding \$30 a year at par, but believes that a rise in the rate of interest will reduce its value to \$950 before a year goes by, will decide against the transaction. Moreover, to potential lenders familiar with past experience the speculative risk of a subsequent rise in rate will probably appear to grow as the current rate itself declines.

Thus either an absolutely low rate of interest or a rate that some regard as likely to rise may cause a large increase in the quantity of money in the system, if the holding of idle balances involves no financial sacrifice. And naturally the two elements in combination will tend to increase liquidity more than either element separately.¹⁸

If the various points here considered are brought together, they make a strong case for supposing that in a full-employment market economy steps would be taken to bring the long-term rate of interest under social control. A rate decided upon by democratic political process would probably come as close to reflecting popular sentiment about the intensity with which society should build for the future as any other available index. But, whether the interest rate was selected in this manner and for this purpose or in some other manner and with some other end in view

18. These points were made clear by Keynes: "Unless reasons are believed to exist why future experience will be very different from past experience, a long-term rate of interest of (say) two per cent leaves more to fear than to hope, and offers, at the same time, a running yield which is only sufficient to offset a very small measure of fear." *The General Theory*, p. 202.

—for example, to please the groups in the population with large money savings—its approximate stabilization¹⁹ would help to stabilize production for market and the desire for liquidity. The plotting of its course for considerable periods in advance would bring a number of favorable results. First, it would remove one of the potential price changes whose anticipation causes fluctuations in the demand for capital goods. Second—and this is very likely more important—it would eliminate the logical basis for speculative changes in the desire to hold money balances, and occasions when new money would need to be brought into being by government action in order to maintain an adequate circulation would therefore be less likely to arise. Finally, it would spare society such wasteful mistakes as occur when construction assumes forms dictated by rates of interest that themselves are based on mistaken forecasts of what the cost of borrowing will be later on.

Naturally no government can lay down a course of action that will rigidly bind society for an indefinite term of years. This, however, is not to deny the possibility of securing the advantages of a large measure of foreknowledge

19. It might be possible for a full-employment market economy, without sacrificing the essential benefits of interest-rate *stabilization*, to supplement its other control devices with interest-rate *variations* held within narrow limits. And, since central bank action to lower and raise interest rates holds a leading place among traditional mechanisms designed to bring about business expansion on the one hand and contraction on the other, this might be desirable procedure. But on the whole, once continuous full employment is assured in a market economy by virtue of a primary guarantee of the size of the aggregate final market, backed by the ultimate guarantee contained in a program of planned public work which is expanded and contracted as necessary to neutralize temporary fluctuations, the logical function of the rate of interest would seem to be to serve as regulator of the amount of "roundaboutness" in production, not of the amount of production itself.

and continuity, but merely to say that no such thing as absolute certainty is possible in human affairs, no matter how they may be planned or organized.

Summary

THE discussion in this chapter has led in a good many different directions. Let us, therefore, to keep our main bearings clear, trace briefly the central thread of the argument presented in it.

In underwriting the volume of consumer spending for some time ahead, government would not be obliged to settle on one particular trend of consumer spending, with other alternatives ruled out as incompatible with full employment through production for market, since full-employment equilibrium is a matter of price relationships rather than of price absolutes. Very likely, however, the most satisfactory trend would be one securing a stabilization of the general price level over the long run.

Special allowance would presumably have to be made for possible variations in the proportions between consumption output for which consumers would actually spend their money incomes and other final output (since private self-subsistence production, etc., social services or "free" goods production, etc., and national defense production, etc., might all expand or contract); also for possible variations in the amount of consumer credit outstanding; also for international capital movements, or in other words foreign lending (investment) or borrowing. If not allowed for, these factors could cause the general price level and the incentive to production for market to differ more or less from what would result in their absence. The anticipated

variations under these headings might therefore be taken into account when the amount of consumer spending to be guaranteed was calculated, or, if it seemed necessary and desirable, the guarantee itself could be made contingent on, i.e., subject to revision for, any or all of them as they developed.

It is generally desirable to have the rate of (domestic) capital formation or social saving stabilized and responsive to public opinion—its stabilization avoiding disruptions in the construction industry and making the trend of consumption output more predictable, its agreement with general public sentiment being necessary to an optimum allocation of effort. In a market economy the same conclusions apply, although less completely and directly, to the rate of interest, because of the fact that the rate of interest to a considerable extent controls the rate of capital formation. But there are several additional reasons why it would be advantageous for a full-employment market economy to bring the rate of interest under control and lay out its course in advance, one of the most important of these being that this would tend to check large-scale hoarding and dis-hoarding of money.

It must be pointed out that the issues considered in the present chapter are not critical issues for full employment as such, since the fact remains that planned production could be expanded and contracted to take care of any fluctuations—and without altering the basic character of the system, if they were merely fluctuations—in the volume of production for market. The discussion has rather ranged in areas where it is evident that a refined technique might minimize disturbances of the volume of production for market proper and better serve the other presumed purposes of such an economic system.

The question of the monetary controls necessary to give substance to the ideas presented thus far must now be taken up. Programmatic conclusions are not in order, but certain general comments can be made.

Chapter VIII

Monetary Controls

THE monetary stream winds about through a most intricate network of channels, but the money passes through only three sets of locks, being received and paid out by consumers, producers (including banks), and government only. For the moment the two latter terms are used in a special sense, "government" including merely the Federal Government's fiscal aspect or apparatus, centering in the Treasury Department,¹ which leaves other government departments and agencies,² as well as commercial banks and other financial institutions, classified as "producers." This division is arbitrary, but suits the conditions of the immediate problem, which is concerned with the key monetary controls ready to the nation's hand.

The Flow of Money between Production and Consumption

IN modern economic systems, money originates either when commercial banks buy securities or make short-term loans or when government issues it. From another point of view these two methods may be resolved into three: (1) private business (or, sometimes, consumers) may borrow at

1. For practical purposes the balances of certain other governmental agencies may be considered as part of the Treasury balance. The imaginary consolidation of such public accounts raises no problems that need detain us.

2. Including all departments and agencies of state and local governments.

a bank; (2) government may borrow at a bank; or (3) government may issue its own notes. In the absence of free coinage, which formerly obtained under the gold standard, the possibilities are exhausted by these methods. In the third case above, money evidently appears in the first instance in the form of notes, whereas in the other cases it generally appears in the first instance in the form of deposits subject to check created by the lending bank in favor of the seller of securities or short-term borrower. This distinction, however, is not ordinarily decisive in determining the proportions between total currency and total checking deposits at any given time, since the banking system too issues notes (e.g., Federal Reserve notes) and the forms of money are interchangeable at the holder's option. When it comes to the ways in which money disappears, that happens when debt is discharged at a commercial bank through cancellation of a demand deposit, or when government or a bank retires its notes. Formerly it also was possible for the general public to cancel money by converting gold coin into bullion. Except as money is newly created or destroyed, the existing money moves about with greater or less rapidity from producer to producer, from producer to consumer, from consumer to consumer, from consumer to producer, from government to producers and consumers, and from producers and consumers to government. Some of it may be held or hoarded for long periods of time, but even when in continuous motion all of it always forms at any given moment a cash balance for some producer, some consumer, or government.

In order to see first of all what is involved in the problem of maintaining a prearranged rate of consumer spending, it is necessary to consider the various sources from

which this spending can arise and also the various other uses to which consumers' money receipts can be put.

To begin with, for participating in some way in production, consumers regularly receive income payments from producers, i.e., wages, rent, interest, and (distributed) profits.³ In the second place, they may receive money directly from government (as today, for example, in relief payments), but on the other hand they must pay taxes to government. In the third place, they regularly borrow and lend, repay loans, and receive repayments. What is significant here is the net rate at which they are thus "investing" their "savings." The process has many ramifications. There is one net flow as between consumers and producers, and another as between consumers and government, the two combined yielding a final positive or negative net rate of investing by consumers. Thus the latter rate takes account of the purchase of bonds, stocks, savings accounts, mortgages, real estate, insurance policies, etc., where these purchases transfer money from consumers to producers; also (with a minus sign) the corresponding sales and withdrawals, including the receipt of insurance benefits; also (minus) any loans by banks or other producers to consumers;⁴ also (plus) repayments of these loans; also (plus)

3. Entrepreneurial withdrawals may be added or, alternatively, may be considered a part of wages and distributed profits.

4. The effect of consumer credit on the amount of consumer spending needed was discussed in the last chapter. Where it is a question simply of actual totals of payment, such credits may be ignored, or else they may be treated as equivalent to cash loans automatically canceled by additional consumer cash spending when originally made and by reduced consumer cash spending when paid off. Ordinary commercial credit, such as may be extended by a wholesaler to a retailer on open-book account or through the issuing of trade paper, is similar in principle, but does not concern us here since neither party to the arrangement is a consumer.

purchases of government bonds and notes and repayment of any loans extended by government; also (minus) retirement of government bonds and extension of new loans by government.

This would be the whole story, if consumers could not hoard and dis-hoard. However, in the fourth place consumers' money balances may go up or down, leaving less for spending and investing in the first case and more in the second.

The individual consumer has the option—disregarding taxes—to spend or save his money receipts, and the further option to hoard or invest his savings (as well as the third option, which does not concern us at the moment, to invest in debts or in proprietary assets). The individual producer has the same choices to make. Often the course of action elected will result in a payment between two consumers or between two producers, and will thus cancel out without affecting the larger aspect of the monetary circulation under discussion here. A loan or gift by one consumer to another, for instance, has no direct effect on the rate of consumer spending, although indirectly it may of course tend to raise or lower this rate, since the various optional uses of money are often of different degrees of attractiveness to different persons. A sale on the stock market will affect the net rate at which consumers are investing, provided one of the parties to the transaction is a producer and one a consumer, but otherwise not. A payment into a savings account by a consumer will affect the consumer investment rate, but not a payment into a savings or time account by a business house. And so on. In the end the critical quantities so far as the rate of consumer spending is concerned are the rate at which producers are paying out income to consumers, the net rate at which government is adding to or subtracting

from the money in consumers' hands, the net rate at which consumers are investing or disinvesting, and the net rate at which they are hoarding or dis-hoarding.

Evidently a desired trend of consumer spending might maintain itself without government intervention. A constant or indeed a rising rate could emerge, in spite of constant or even increasing consumer investing, if consumers were obtaining sufficiently larger income payments from producers, or were borrowing from banks or other producers, or were drawing on previously accumulated cash balances. However, there is no reason to expect this kind of result to be forthcoming automatically. For example, the rate at which producers are paying out income to consumers may be reduced by the retention of large quantities of undistributed profits, and extremes of inequality in consumer money incomes may reduce the proportion of total incomes spent, since those with large incomes may prefer to save and either invest their savings or, if an attractive return on savings is not in prospect at the moment, hoard them at the bank. With such tendencies at work—as they have been in the United States in recent years—the rate of consumer spending will naturally be inclined to fall short. Under certain other hypotheses regarding the flow of money payments it will be excessive.

Supposing, then, that government has guaranteed the rate of consumer spending, it will have to be in command of effective means for expanding this rate when it would otherwise be too small, and for contracting it when it would otherwise be too large. First, however, a preliminary problem of information is involved. Government will have to keep accurately informed as to the rate at which money is actually being spent in consumer markets.

Assuming agreement about what is meant by a consumer

expenditure,⁵ a straightforward calculation of the total can be made directly from the sales records of the producers supplying goods and services to consumers. The problem of keeping this statistical record up to date is complicated by the multiplicity of little retail outlets and by the fact that a certain proportion of consumer expenditure goes direct to manufacturers, wholesalers, small landlords, and individual professional workers such as doctors in private practice. At present no overall measure of total consumer expenditures for all types of goods and services exists in this country, so that the current aggregate would have to be roughly estimated from such sources as the monthly index of income payments published by the Bureau of Foreign and Domestic Commerce, the Federal Reserve's index of department-store sales, and other sales series. But with modern statistical techniques it should be a relatively simple matter to overcome the difficulties involved and secure an adequate current record, in the form of an index based in part on a sampling procedure or even in the form of an aggregate. The writer is informed that the Bureau of Foreign and Domestic Commerce is now contemplating the

5. A theoretical issue is raised when someone buys a passenger automobile and uses it partly for business and partly for pleasure, or rents a house to live in and turns part of it into an office or workshop. It may also occasionally be difficult to say whether a particular payment for a special service of some kind or for sublet living quarters or for secondhand goods—a rare painting, for instance—should be regarded as being for goods produced or services rendered in the ordinary course of business or whether it should be classed as a transaction between two consumers. Money paid over to producers for the outright purchase of homes is perhaps best classified under consumer investing rather than under consumer spending (cf. p. 154, n. 9 above), and it seems needless to complicate matters by attempting to count the implicit rent of owned homes, or any other implicit payments and receipts, as if they were actual expenditures. But in practice any reasonable set of definitions, adhered to consistently, will serve perfectly well.

development of an index of consumer expenditures, probably at first confined to commodities but ultimately including services as well, which when available will appear regularly in the *Survey of Current Business*.

Total consumer spending could also be calculated through the monetary system if figures were obtained showing the payments made to individual incomes by producers, the additions or deductions attributable to government's actions, consumers' net investing or disinvesting, and the net rise or fall in their cash balances. In other words, if certain innovations were made in monetary mechanics, the banking mechanism could be used to check the estimate of the rate of consumer spending derived directly from retail sales. Whether the advantages of having an extremely sensitive and up-to-the-minute index of variations in the various major rates of money flow would be sufficiently great to make it worth while to introduce the requisite technical changes in present monetary procedure is not a question that needs to be answered here. The extent of the benefits apparently not otherwise obtainable would have to be carefully studied in relation to the possible disadvantages of unfamiliarity, real inconvenience, and evasion of rules to be looked for, before a conclusion could be reached on this point. The following comments are therefore to be regarded as hypothetical, and as constituting a digression from the main line of argument. The purpose in calling attention to these possibilities is merely to show that the problem of information about the monetary circulation assuredly can be solved with whatever degree of precision may be considered essential.

If money in the hands of consumers were distinguishable from money in the hands of producers—if consumer

and producer money were "exchangeable but not interchangeable"⁶—the monetary authorities would automatically secure a complete record of the volume of money payments in both directions (consumers to producers and producers to consumers) in any given time period, as well as of the aggregate size of the money balances held by producers and by consumers respectively at any given moment. Thus it would at once be apparent, which is not the case today, whether a particular transaction (a sale on the stock market, for example) resulted in a transfer of money one way or the other between a consumer and a producer or whether it was merely an interproducer or an interconsumer transaction. And if, in addition, payments by consumers to producers could be divided by inspection into (a) payments for consumer goods and services and (b) other payments, then the current rate of consumer spending would also be recorded automatically.

To secure these results it might be stipulated, first, that the banks should keep business demand deposits strictly separate from income demand deposits; second, that cur-

6. The phrase is an adaptation from G. D. H. Cole; see his *Fifty Propositions about Money and Production* (London, Stanley Nott, 1936), p. 6. The essential idea has been expressed in various places—e.g., in Cornele Berrien Adams, *National Industrial Organization (Under Social Control)*, published in Santurce, Puerto Rico, in 1934, and in an unsigned article entitled "The Place of Money in a Planned Economy," *The New Statesman and Nation* (June 30, 1934), p. 988.

In contrast to the proposal that money be given characteristics making it impossible for it to be available for consumption and for production purposes at one and the same time, may be mentioned the proposal sometimes heard that money incomes be paid in nontransferable form, so as to be available only to a single consumer or his legally recognized dependents. This, however, while it would doubtless tend to eliminate thefts of money, would seem superfluous from the standpoint of quantitative regulation of consumer spending.

rency should be used as money only by consumers; and third, that all nonconsumption (i.e., investment) payments by consumers should be recorded as such, in cases where doubt was possible, by the producers receiving them.

The first of these provisions would oblige the individual proprietor to keep two accounts—a personal account and one pertaining to his business—and to distinguish sharply between the money that he considered as “invested” or “undistributed” at any given moment and the money that he felt free to spend to meet his consumption requirements. Aside from this, however, its adoption would scarcely be noticed by the public generally, while it would doubtless help very materially to clarify the monetary picture, even without the support of the other two measures mentioned.

The further stipulation that currency should not be used as between producers, all payments by one business to another being made by check, would in conjunction with the foregoing render the distinction between money in the hands of producers and money in the hands of consumers to all intents and purposes complete—instead of complete with respect only to deposits and estimated with respect to currency. Since payroll payments, all other payments to income (rents, interest, dividends, etc.), withdrawals of sums invested, and so on would be made available to the recipients through the producer’s bank, the consumer could always elect to receive either currency or an addition to his bank balance, at his option. Again, payments by consumers, whether to buy consumer goods and services or to invest, could be either by currency or by check. Under the assumption, however, each business payee would be required to deposit all currency received—except, in the case of retail-

ers, such amounts as were needed for the purpose of making change for consumers—and to use checks even for petty-cash transactions.

The third provision would have the effect of requiring those producers whose receipts were largely in the form of consumer payments for goods or services to report the nature of all other receipts from consumers, while on the other hand the sums received from consumers by producers who never or only seldom sold direct in the consumer market could be automatically assumed to represent investment transactions *except* as otherwise reported.

Avoiding Inflationary Excessive Spending

A GOVERNMENT committed to the principle of “fiational income insurance” will have to be able to expand consumer spending when it is disclosed as falling short, and to contract it when it threatens to be excessive. How can this be accomplished?

A contraction can obviously be brought about by any measures that reduce the total sums available for such spending. Either taxation or borrowing—if the latter is carried out in such a way as to increase the public’s thrift⁷—will serve the purpose. Or, in theory at least, certain of government’s ordinary contributions to consumer income (by way of the social insurance system, for example) can be so designed as to be flexible in amount within reasonable limits, and, if they are flexible in both directions, consumer spending can be reduced through the operation of this mechanism.

7. That is, if it does not merely shift the public’s funds from the securities of private companies to government savings bonds, or cause individuals to borrow at the bank in order to buy these bonds without reducing their scale of consumption.

The easiest procedure in many respects will be to impose a special sales tax just sufficient to remove the temporary surplus of expenditure, the amounts thus collected through retail merchants being then simply disregarded, i.e., deducted, in computing current consumer spending. Unless a large total sum is involved, such a tax can be placed on luxuries. But, in any case, since the objective will be the carrying out of the prearranged social program with respect to the rate of consumer spending, in an economy maintaining full employment, the familiar objections to sales taxation will not apply with the usual force.

It may be observed that it will be possible for consumers to defeat government's efforts to restrain their rate of spending so long as they are willing and able to reduce their aggregate money balances. But such dis-hoarding will in ordinary circumstances be unlikely to occur on any large scale, and of course it will finally be limited by the extent of the existing consumer balances.

The importance of preventing consumer spending from exceeding the guaranteed rate must be stressed. Some persons will perhaps be inclined to consider that it is only necessary to see that there is no deficiency. Actually, however, the crux of the problem is to avoid both too little and too much consumer spending.

If consumer spending is not strictly controlled, full employment itself may send the economy "slipping into a spiral in which wages chase prices and by so doing raise prices and so produce demands for higher wages and so on *ad infinitum*."⁸ In some circumstances the rise in the cost of living might come first and start the drive to raise money wages; on the other hand, a general rise in wage levels

8. Quoted from the *K-H News-Letter*, published at Headley, Hants, England, issue of November 10, 1939.

could start as the simple and immediate result of labor's increased bargaining power due to elimination of unemployment.⁹ As a leading English economist has phrased it, "the point of full employment, so far from being an equilibrium resting place, appears to be a precipice over which, once it has reached the edge, the value of money must plunge into a bottomless abyss."¹⁰

The possibility that full employment might involve acute monetary instability should be accorded a weight duly proportioned to the fact that it arises out of the basic tug of war over the distribution of the national income. However, it must be pointed out that economists who consider an upward spiral of price inflation to be inevitable under conditions of full employment are not thinking in terms of an economy in which the rate of consumer spending is definitely determined ahead of time. It is probable also that some of them are taking it for granted that it is impossible for money-wage rates to rise at the expense of the share going to ownership without causing a contraction of production for market. But such an assumption overlooks at least one important point, the distinction between the net wage-rate *costs of employers* and the wage-rate *receipts of employees*.

It is true that, if money-wage rates and the volume of

9. Wage rates would of course be apt to be affected some time before actual full employment was reached, especially since bottlenecks would very likely develop in certain types of skilled labor. Professor Slichter of Harvard recently predicted that "probably not more than half" the workers unemployed in the United States "can be absorbed by industry without creating many shortages of skilled workers that would start an upward spiral of costs and prices." Sumner H. Slichter, "The Present Nature of the Recovery Problem," *Proceedings of the Academy of Political Science* (January, 1940), p. 4.

10. Joan Robinson, *Essays in the Theory of Employment*, p. 24; and see also her remarks to the same effect on pp. 25-29.

anticipated consumer spending are in equilibrium at full employment, a rise in money-wage rates paid will tend to cause unemployment (other things remaining equal, including the ability of employers to pay labor less than a marginal productivity wage in cases where the market is especially imperfect), while a reduction in these rates of remuneration will tend to cause overbidding for labor's services. This derives directly from the obvious proposition that in a system of market enterprise the employer will not pay the worker more than he believes the latter to be worth in terms of contribution to his business revenues, in association with the equally familiar principle that the value of an additional worker to any enterprise at any given time tends to decline as the number of workers employed is increased.

However, the crucial point about the stated conclusion is that it refers to the rates of wages paid by employers—that is to say, the net costs to employers on account of wages paid—and not to the rates of wages received by employees. There is nothing in the nature of the demand for labor that necessarily prevents money-wage rates received from becoming stabilized below marginal-productivity levels, as the result of a payroll tax causing the employer's total cost on account of labor hired to exceed what is paid directly to labor. And equally there is nothing to prevent money-wage rates received from standing above marginal-productivity levels, without prejudice to full employment, as the result of a payroll subsidy reducing the employer's net cost on account of labor hired below his actual (gross) payrolls.

In other words, without tolerating unemployment or on the other hand abandoning the traditional mechanism of production for market, society can allot as small or as large

a share of its total income to labor as it chooses—that is to say, as public opinion will consider right and proper.¹¹ This conclusion is subject to the obvious proviso that the distribution selected must not indirectly set up controls in society that will interfere with government's monetary controls. It is also subject to the consideration that total production will be bound to fall off if adequate incentives to effort are lacking¹²—which links up finally with the stipu-

11. Cf. the often-quoted passages in Bk. II, chap. i of John Stuart Mill's *Principles of Political Economy* (1848) to the effect that, whereas "the laws and conditions of the Production of wealth partake of the character of physical truths," "the Distribution of wealth . . . is a matter of human institution solely."

12. The principles of income distribution in force should not conflict with the prevailing state of psychology taken in conjunction with the various tangible but nonmonetary incentives—such as promotion, authority, public recognition, and so on—operating at the given time; otherwise society will suffer losses from a shrinkage in its total labor supply, or from a relative distortion of the supply available for work of different kinds and different degrees of difficulty, or both. Suppose, for example, that differences in wage remuneration for the various kinds of work performed are already at equality with differences in the corresponding marginal social products. Some shift toward a less economic distribution of labor will then tend to be induced if the benefits received by workers from a payroll subsidy or from any other distribution of money or prerogatives are made dependent on earned-income differentials, since in that situation the total rewards to those holding different jobs will automatically differ by more than the values of the jobs to society. However, this is a case where theory deals with quantities difficult to measure in practice and is therefore not likely to be very helpful. A better guide to policy is provided by the common-sense rule that piecework systems of remuneration and wage differentials in general are more necessary from the standpoint of efficiency when the other competitive incentives and the coöperative incentives (and possibly in certain cases a separate "instinct of workmanship" may be detected) between them are weak than when they are strong. When it comes to the total labor supply, this theoretically tends to vary with the basic or minimum-wage level, so that in the abstract a special significance may attach to a basic wage that will correspond exactly to the market value of the least valuable services performed. But this point also is rendered largely academic, as we have already seen, by the part played by custom, legislation, and so on in deciding choices between working and not working as well

lation that entrepreneurs themselves must not be placed in a position where they can do better by hiring out their services and their money to others.

This last point comes close to the heart of the practical issue as between "earned" and "unearned" income, and deserves to be emphasized. In anticipation of further comments on taxation to follow, it can be stated to advantage in negative form. Taxes on profits—whether they are to be used for general social purposes or specifically for a payroll subsidy to raise the wages received by labor above marginal-productivity levels—need not have a restrictive effect if "risk money" is not penalized in relation to the money loaned passively and if wages of management are not reduced in relation to ordinary wages and salaries. One qualification seems necessary. Even with no *relative* penalty involved, the entrepreneur's type of risk or way of life as such might perhaps seem less attractive as the stakes of the game were lowered. On the other hand, taking the reactions of the population as a whole rather than merely those of some given group of entrepreneurs, it cannot be assumed offhand that this would be so.

It may be concluded that the dreaded upward spiral of price inflation, which is a mechanism that can be used for attempting to avoid any redistribution of real income in favor of labor, need not occur, and will not occur if once a sovereign government establishes control over the volume of consumer spending. But this is an economic judgment. As pointed out in the opening chapter, the political problem involved is not in any case to be minimized. The close as the length of the working week. On the whole, therefore, while certain broad axioms can be formulated about economic and uneconomic income distribution principles, they merely suggest the general framework of the problem, leaving plenty of room for natural development and practical experimentation.

ing of the inflation valve will not of itself reduce the pressure in the boiler. The struggle over income distribution will not be abolished by the mere elimination of one of the forms this struggle sometimes takes.

Avoiding Deficient Spending

So much for the possibility that consumer spending will exceed expectations and need to be contracted. Today at least the opposite contingency appears of greater practical interest. Let us now turn to that and see how government can expand consumer spending if it threatens to fall short of the amount guaranteed. How will additional sums be put into the hands of consumers to enable them to spend larger amounts, what assurance is there that such additional sums will not simply be added to consumer investments or to consumer money balances rather than spent, and where will such additional sums come from in the first place?

The first question—to whom and by what method the needed additional amounts will be distributed—obviously has many possible answers. Theoretically the required sums can be loaned to consumers, assuming the existence of willing consumer borrowers.¹³ But there will perhaps be little to recommend this procedure, and, considering that repayment of the loans will tend to contract consumer spending in later periods, this method of putting money into the hands of the general consuming public will prob-

13. Government may also take the occasion to retire some of its debt or buy needed properties. But the by-product in terms of added consumer spending will be reduced by the fact that such payments are likely to go largely to banks and business corporations generally, or to individuals who will save rather than spend what they receive in this way.

ably be avoided unless it is believed that tendencies to deviation from the planned trend of consumer spending will later on be more on the side of excess than on the side of deficiency. (In that case, government borrowing from consumers may well be avoided in times when excessive consumer spending threatens.)

If it is decided to subsidize consumers outright, government's regular payments to income, such as its contributions to social insurance benefits, might possibly be made the vehicle; for example, the recipients of old-age pensions might on such an occasion find themselves the beneficiaries of a sort of dividend in addition to their normal allowances. It is perhaps more probable, however, that some formula will be devised for making special payments unconnected with the normal forms of income distribution. To achieve impartiality, checks could be mailed to all heads of families and single persons at specified intervals so long as expansion is required, all adults benefiting equally from these "social dividends" and each child the same as every other child. Again, the beneficiaries could be selected by lot. Clearly, any number of alternative arrangements can be devised for giving consumers money to spend, and it is up to Congress to legislate what methods shall in fact be used.

The second question concerns the possibility that government's effort to bring consumer spending up to the predetermined level, when such government action is necessary, might be thwarted by the investing or hoarding of the additional sums distributed by government. A partial answer to this is given by the practical consideration that it will probably be public policy to distribute any additional income largely to low-income groups, whose tendency to spend this money on consumption will very much predomi-

nate over other tendencies.¹⁴ But in any event government will be obliged to regulate the gross amount of the subsidy put in the hands of consumers to the end that the net addition to consumer spending, whether the same as or different from that quantity, will be of the required size. If government can find money to distribute as additional income in the first place, then presumably it can if necessary also find the money required to overcome absorption of part of this additional income into additional investing or additional hoarding. Conceivably large hoards may collect—either in the hands of consumers or, if the latter invest their money, then in the hands of producers. In that case, to obviate the need to keep creating quantities of new money, government may find it advisable to tax or otherwise regulate hoarding as such. This possibility will be considered in a few moments.

Let us for the present, however, return to our fundamental third question. Where will government obtain the money for distribution to consumers, in case such distribution is needed to keep consumer spending at the prearranged level?

At this point, it will be observed, the inquiry broadens out. Because of the special importance of consumer spending in the general monetary scheme, attention is centered here on the means for controlling this piece of the mechanism. However, government's problem of raising money

14. If there was anything to be gained from having it physically impossible to hoard or invest such income subsidies, they could be paid in a special form of money acceptable only in purchase of consumer goods and services. The food-stamp plan of the Federal Surplus Commodities Corporation, operating in several hundred localities today, makes a limited application of this principle, for a description see, e.g., Buel W. Patch, "Expansion of the Food-Stamp Plan," *Editorial Research Reports*, Vol. I, No. 2 (January 10, 1940).

is the same irrespective of whether this money is used to bolster consumption, or to maintain employment in some other manner (and if there is no consumer-expenditure guarantee, prevention of unemployment will require the raising of larger sums than otherwise for alternative measures), or indeed to accomplish some other purpose having nothing to do with the employment question. What can be said about the sources of funds for subsidies to consumers will therefore also apply to public finance in a much more comprehensive way.

Suppose that government is already fulfilling its guarantee of consumer spending, and that employment is nevertheless not up to the desired level in the market sector of the economy. Previous chapters have suggested a number of reasons why this may sometimes be the case. It will evidently then be necessary, if unemployment is not to develop, either for the planned production sector to expand more or less permanently to take in the workers who would otherwise be idle, or for some additional stimulus to be given to production for market so that jobs will be restored in regular lines of work. Such a stimulus can take the form of a *temporary* expansion of planned production financed in such a way that it makes a net contribution to the revenues of market enterprise, or it can take the form of subsidies or tax remissions to production, or it can take the form typified by government contracts, where government buys additional goods or services from business. In any of these cases government expenditures will tend to rise relative to government revenues, making it necessary for government to find additional funds somewhere to bridge the gap.

Consider the second line of defense against unemployment provided by an expansible program of public work.

If a decline in employment in market enterprise is sensed in advance or caught at the very outset, government may be able to forestall layoffs by tax remissions or other business stimuli, and may thus preserve full employment without any expansion of public jobs.¹⁵ More probably some emergency public employment will have to be created as a temporary measure. And this itself can be made the instrument for improving the previously existing relation between the receipts and costs of production for market—an improvement presumably needed unless it is confidently expected that the decline in market enterprise will in a short time reverse itself automatically. In the first place the emergency public employment may result in new purchases of materials from private contractors. Whether that is the case or not, however, government will at any rate take over certain payroll charges that were previously costs to private enterprise, without (under the assumption of guaranteed consumer spending) permitting the size of the total market to be reduced, so that an impetus to reemployment in regular lines of work should result, unless this public wage bill is covered by levying additional business taxes.

The problem of the budget may be cast in more general form with the help of algebraic symbols. Let x stand for payments to government by producers for market, x being equal to u , net taxes on producers for market, minus v , the amount spent by government in purchase of goods and

15. It might expand planned production permanently, but cover the cost of this expansion through the sale of products or otherwise. In that case, as in the case considered in chap. vii in which a rise in production for government's order automatically results by previous agreement in a corresponding reduction in the individual-consumer expenditure figure, neither the budget nor profit prospects will be affected. Further layoffs may therefore ensue unless forestalled by separate tax action, etc., just as above.

services from producers for market either for the use of the nation as a whole (airplanes) or for free distribution to consumers (today, certain "surplus" foodstuffs), plus w , net payments by producers for market to planned production for capital goods, etc.¹⁶ Further, let y stand for taxes on consumers, and let z stand for individual consumer spending for the products of planned production (public housing). To avoid a budget deficit, $x + y + z$ must cover all costs of government, that is, planned production plus debt service and all contributions to individual incomes, whether through ordinary pensions and social security benefits, etc., or through special disbursements. It is self-evident that direct subsidies to consumption constitute merely one of many possible sources of a budget deficit, others being a rise in planned-production payrolls, a decline in u , net business taxes, a rise in v , occasioned by additional government contracts to business for the production of final goods of some kind, and a decline in w , brought about perhaps by new purchases of construction materials for emergency public works.

Public Borrowing, Taxation, or Noninterest-Bearing Notes

If consumer spending, left to itself, tends to fall short of the guaranteed rate, so that government needs to add to consumer purchasing power, or if additional funds are required for some other public purpose, government will have to borrow, or levy additional taxes, or print noninterest-bearing notes.

16. For example, planned production may sell electric power and buy construction materials, and on the whole w can be either positive or negative.

Except as funds are available in the Treasury's working balance—a possibility that is practically speaking of slight importance and will herein be disregarded—these may be considered the only general alternatives, assuming the marketable output of government's planned-production enterprises is already being sold. For completeness the term "taxes" should be broadened to include all direct appropriations of money, notably fines, fees, and special seizures such as may accompany a revaluation of gold, and note should also be taken of the possibility that government may sell some of its capital assets. But these emendations of the previous statement can also be disregarded without impairing the main argument.

Government may borrow simply to lend again. That is, it may go into the banking business, supplementing the existing banking service by borrowing from consumers to lend to other consumers or to producers and from producers to lend to other producers or to consumers.¹⁷ Although this merely makes the loan market a more "perfect" market than otherwise, it may in certain circumstances be all that is necessary to prevent a fall (or rise) in consumer spending, or a contraction of business enterprise due to a difficulty in obtaining bank accommodation. For example, it may stimulate activity very considerably by making it possible for small concerns to raise money for plant expansion, etc., on terms comparable to those enjoyed by the business giants. On the other hand, instead of linking borrowing and lending in this manner, government may give away what it borrows to consumers or producers.

17. Government may also offer to guarantee certain private loans. While such action can be described as a form of mediation in the loan market, it is essentially equivalent to subsidization of the borrowers in question, for whom the cost of raising money is reduced through elimination of the lender's risk of losing his investment.

Loans may be extended to government on a wholly voluntary basis by consumers with unspent incomes, by ordinary businesses, and by commercial banks and other financial intermediaries. Or circumstances may conceivably arise in which government's "credit" is not good enough to enable it to secure purely voluntary loans, without raising the rate of interest above the prevailing level, from those who have money to lend, and in that case government may decide to use its authority to bring pressure to bear on potential lenders.

Lending might be called a patriotic duty. Commercial banks might be obliged to issue new demand deposits in exchange for government bonds. Sums entrusted to savings banks, life-insurance companies, etc., might be required to be loaned to government if not invested but merely held in cash form in demand deposits at a commercial bank. All demand deposits in excess of a stipulated figure—or of a scale so arranged as to take account of the normal liquidity needs of different classes of depositor—might be automatically transferred to a special kind of time account after the lapse of a certain interval, and then treated as above; in that case the individual or business corporation affected would acquire an interest-bearing investment (a time or savings deposit) in place of money (the deposit subject to check, so far as it was classified as in excess), the bank would acquire interest-bearing government bonds or notes, and government would have the otherwise idle money. Logically speaking, the actual rules laid down should depend to some extent on the view taken of the nature of the commercial banking process. Out of the legally correct premise that demand deposits belong to the bank might come an emphasis on the responsibility of the commercial banks for all excess reserves, and consequently an emphasis

on their obligation to lend to government if not lending to private enterprise. On the other hand the theory that demand deposits are "money in the bank" for the depositor¹⁸ would imply that the depositor himself should have some personal obligation not to upset the economy by excessive hoarding. Practical considerations suggest that both points of view might be taken into account, since for government to impose public duties on the banks would be no novelty and yet for the banks to create new deposits in favor of government while large private deposits were lying unused might invite dangerous dis-hoarding later on. Here, however, it is sufficient to note that, while the requirements imposed (whatever they were) would raise certain problems of mechanics,¹⁹ no insuperable obstacles need arise to prevent their accomplishing their purpose.

If a borrower is able to bring any appreciable pressure to bear on a lender, that implies by definition that the lender is no longer a completely independent agent. Indeed at the extreme a borrowing program might have certain of the characteristics of a tax program. However, while the lender would presumably not be able to dictate the terms on which he would permit his money to be used, he would still be the recipient of interest on his savings at a socially determined rate, and the latter could perfectly well be in harmony with public opinion—as closely as that could ever be determined—about the proper rate of social saving.²⁰

18. This theory would presumably square with the law in a banking system operating under the 100 per cent reserve principle, and probably represents prevailing opinion under fractional reserve banking today.

19. For instance, ordinary commercial bank time deposits might have to be treated like demand deposits to prevent discrimination in their favor, or, alternatively, like savings deposits in separate savings banks (which result, pending reinvestment, in demand deposits in favor of the savings bank at a commercial bank).

20. See chap. vii above for a discussion of this point.

Thus the "propensity to save" of some persons and corporations need not interfere with the ability to consume of society as a whole.

Insofar as government puts itself in funds by means of borrowing, the public debt will of course rise, with the implied corollary that the payment of interest and principal to the holders of the bonds will later on necessitate some redistribution of income in their favor by way of taxation. Insofar as the sums borrowed are loaned directly or at one remove by the commercial banks, operating on the basis of fractional reserves, a gross increase will occur in the quantity of money, and perhaps a net increase—depending on whether or not private bank loans are paid off in equal volume. Insofar as a net increase in the quantity of money does materialize, the extent to which the spending of consumers or producers may at some later time be expanded through the simple process of using up cash balances will also grow greater.

The second alternative way of bringing more money into the Treasury is by taxation. This opens up a vast subject, and no attempt can be made to explore it adequately in these pages. However, certain aspects of it can be briefly reviewed to show their bearing on the problems under investigation.

The imposition of a tax perhaps originally designed to secure additional public revenue will in some cases cause a contraction of production and in some cases cause an expansion of spending motivated by the desire to avoid the tax. These considerations are important here. So also is the fact that most taxes are difficult to impose and collect in time to meet an immediate temporary need for funds. In theory Congress might give the Treasury Department discretion to vary tax rates between sessions in accordance with the

state of consumer spending, and it has already been suggested above that some such procedure would be practicable as applied to a tax on sales in retail markets calculated to offset any threatened *excess* of consumer spending. But taxation in most of its familiar forms has not proved a flexible enough instrument to suggest that it could be counted on to make all necessary quick adjustments.

Ordinarily it seems clear that an increase in taxes on business operations, business receipts remaining constant, will cause some contraction of production and employment by making the relation between business revenues and business costs less favorable than before. Sales and other familiar excise taxes may be included here. A special levy, not expected to be repeated, may fail to have this effect, and the general effect itself may tend to be obscured by the more obvious features of such taxation—notably, in the usual case, its discriminatory aspects. But if it is known to be public policy to resort to tax increases when additional money is needed for, say, distribution to consumers, then this contingent burden will hardly be overlooked by those upon whom it is likely to fall, which of course applies to other kinds of taxes besides those on business operations.

A rise in tax rates on business net income may or may not have adverse repercussions on the volume of production, depending largely on whether the producers affected are making to begin with only the profits of pure competition or whether they are making the excess profits of monopoly. Insofar as the added burden falls on the excess profits of monopolies, it will presumably reduce the aggregate amount of (retained) profit necessary to motivate a given amount of production rather than the amount of production itself, since it will hardly depress the monopolists' proprietary return below the standard set by the alterna-

tive opportunities open to the money and managerial skill involved.

If it is undistributed profit in particular that is taxed at higher rates, this will tend to force a greater distribution of business net income. Thus an expansion of consumer money incomes and consumer spending may possibly be brought about without any additional funds passing through the Treasury.

So far as concerns additional taxation of individual incomes and property, there can be no doubt that a formula that redistributes money in favor of low-income groups will tend to increase the aggregate amount spent in consumer markets, since the alternatives to spending are always of less practical importance to the poor than to the rich.²¹ In certain circumstances an increase in personal income taxes, like an increase in taxes on business net income, may cause some falling off in production enterprise. Estate and inheritance taxes, however, can hardly have this repercussion, nor can taxation of the economic value of land in the hands of either producers or consumers—the policy so eloquently urged by Henry George—since economic rent is a surplus not traceable to the productive efforts of the landowner.

An alternative not to be overlooked is the possibility that taxes might be imposed directly on holdings of money. This approach was advocated for many years by Silvio Gesell, has been favorably considered by such outstanding economists as Fisher and Keynes, and was recently brought into new prominence in this country by Dahlberg.²²

21. See p. 199, n. 10 above for an estimate of the amounts saved by different income groups in the United States.

22. Silvio Gesell, various writings including *The Natural Economic Order*, English translation, Neo-Verlag, Berlin-Frohnau, 1929. Irving Fisher, *Stamp Scrip*, Adelphi Co., 1933. Keynes, *The General Theory*, pp. 353-

The novelty of the suggestion would place proponents under the burden of proving necessity, and it is for what this kind of taxation could accomplish in case of necessity that attention is directed to it here. While it might raise large revenues, its primary purpose would probably be to discourage excessive hoarding when the rate of interest was below the level considered tempting by those in a position to save.

A low interest-rate policy is not essential in order to maintain full employment. However, it may be generally desired, and there are in any event great advantages in having the interest rate under social control, as was pointed out in the last chapter. Considering that the tendency to hoard is capable of putting difficulties in the way, as noted, a question is raised as to the mechanisms by which such control might be solidly established.

Although central banking authorities have secured effective control over short-term rates in the leading money centers, the above question can probably not be answered satisfactorily on the basis of past experience so far as long-term rates are concerned. Naturally the latter are influenced by the interest obtainable on short-term loans, so long as the general public and the banks can shift their funds back and forth between bonds and short-term paper in search of the highest return, and therefore to a very considerable extent all rates of interest may be expected to move or remain constant together.²³ Moreover, the central

358. Arthur Dahlberg, *When Capital Goes on Strike*, Harper & Brothers, 1938. The basic principle involved in the "hot money" proposals, as they are familiarly called, has been put into operation a number of times on a small scale.

23. For a discussion of American experience in this respect, see Winfield W. Riefler, *Money Rates and Money Markets in the United States* (Harper & Brothers, 1930), pp. 9, 116-123.

banking authorities can doubtless do more than they have in the past to check hoarding based on speculative anticipations of a later rise in the interest rate, by simply announcing with conviction what their long-run policy in the matter is. It seems quite likely, however, that new techniques would have to be developed to enable society to establish its control over the long-term rate securely enough so that any desired rate, no matter how low, could always be made effective. In this connection two possibilities, besides that of direct public or semipublic organization of the investment-banking process,²⁴ appear particularly deserving of further consideration. Keynes has suggested that the central banking authorities should offer to buy and sell at stated prices gilt-edged bonds of all maturities (instead of short-term bills only), thereby directly regulating the yield obtainable on them.²⁵ A second possible approach obviates the need to expand the total quantity of money by going straight to hoarded money and moving it by taxation or by requiring that it be loaned, in either case activating the supply side of the loan market and thus tending to hold down the yield expected on loans in general.

To be effective, a tax on "idle money" would have to fall both on demand deposits and on currency. One possible arrangement would be to have a standing percentage

24. As in Berle's plan for capital credit banks, with rediscount privileges with the Federal Reserve, to make long-term loans for plant construction at rates of interest adjusted to the country's need for such construction rather than to profit considerations. (According to this proposal interest rates would also be selective, the capital credit banks charging a hospital say $\frac{1}{8}$ per cent when asking 4 or 5 per cent from straight commercial ventures.) See A. A. Berle, Jr., *Memorandum: A Banking System for Capital and Capital Credit*, presented to the Temporary National Economic Committee, May 23, 1939; (included in T.N.E.C. Hearings, Part 9, Savings and Investment, pp. 4066-4079).

25. *The General Theory*, pp. 205-206.

tax, which might be varied from time to time but would be uniform at any given time, payable by anyone with a checking deposit at the bank or with currency in his possession.²⁶ Currency in this case would become "stamp scrip"—i.e., paper money to which stamps would have to be affixed at stated intervals to maintain its value—or "calendar money" in some form. Since such taxation would weaken the advantages of cash liquidity, or in other words increase the incentive to make loans (and buy commodities or any assets other than money) and reduce the incentive to borrow beyond immediate spending needs, it would operate in the direction of lowering the rate of interest. The search for ways of preserving a relative amount of liquidity while at the same time avoiding the tax on money itself would expand the demand for securities and thus bring down the rate of interest obtainable on bonds. It would similarly increase the desire to lend money on short term and on call, thereby directly lowering the rate of return on such lending. Since the supply of funds entrusted to savings banks would also be likely to increase, while savings banks would be taxed on the uninvested balances of these funds, lower rates of interest would probably be paid on savings deposits.²⁷

26. Dahlberg points out by way of partial precedent that bank balances are taxed as personal property in several states today. *When Capital Goes on a Strike*, p. 92.

27. As under the supposition of automatic or obligatory lending of large money balances, previously discussed, it would have to be decided whether time deposits in commercial banks should be treated as money belonging to the depositors (and hence as taxable to them) or whether they should be treated as money loaned to the bank (and hence as taxable to the bank, like money belonging to its stockholders, unless the bank spent or reloaned at the same rate). Naturally in either case the net rate of interest obtainable on time deposits would, also, tend to fall. One solution—such as might be introduced in connection with the 100 per cent reserve principle—would be to segregate time-deposit banking, regarded as an aspect of the lending

At the same time the tax on money would stimulate the demand for foreign money—if this was not discouraged by application of the same tax to dollar balances held in this country by foreign banks, or prevented by regulations imposed with respect to short-term capital movements in general—besides stirring up the demand for jewelry, precious metals, and so on. Even real estate and various durable commodities offering the owner no great amount of liquidity but having the advantage of low storage, wastage, or other carrying costs might well be sought out, so that the tax might create an unusual degree of activity in a number of different markets and in some lines of production. Land values might rise, in the absence of increased rates of taxation on assessed land valuations and economic rent. These secondary effects would have to be taken into account.

A variant policy would be to have the tax apply to large amounts of money only—that is, to excess balances, defined in any convenient way. Here most individuals and most businesses would remain unaffected, but the hoarder of large amounts would be penalized.²⁸ This might be done

business, from demand-deposit banking, regarded as concerned with the provision of a convenient mechanism for holding and paying money. As suggested by Dahlberg (*When Capital Goes on Strike*, pp. 82–88, 199–207), some form of the 100 per cent reserve plan might also prove useful to forestall a shrinkage in the quantity of money upon the introduction of a substantial tax on money, since otherwise demand deposits might possibly be liquidated on a large scale through failure of the commercial banks at first to make new loans and investments as rapidly as customers, seeking to avoid the tax, paid off old loans and bought bank assets.

28. While such a rule would be readily enforceable if all money were in the form of demand deposits, it might have to be discovered through experience whether the secret accumulation of large quantities of currency would tend to defeat it. It is perhaps in this connection, i.e., if a tax on excess hoarding ever seemed to be necessary, that the possibility of “dated” currency (paper money reissued at stated intervals and marked as valid only if used within a certain period of time) might be given consideration.

on the theory that, since the economy required a certain amount of money for its satisfactory operation, anyone abstracting a considerable sum from the general circulation merely to put it in storage would be causing society the inconvenience of creating additional money and would therefore be committing an antisocial act.

Let us pass on to the third method whereby government can put itself in funds. Government does not necessarily have to rely on borrowing and taxation, since it can issue its own noninterest-bearing currency notes, such as greenbacks.

For government to print noninterest-bearing notes when it requires money, instead of printing interest-bearing notes and bonds and selling them to banks and the general public, admittedly violates the canons of orthodox private finance. The objection is understandable both from the standpoint of the private advantages of those who might buy the bonds and also from the standpoint that *excessive* issue of paper money by government so raises prices that all debtor-creditor relationships are upset and eventually calamity results for large sections of the population, as has happened on numerous occasions in history. But government does not need to turn to its own printing press to obtain money. A modern monetary system can also be inflated without limit through the sale of government bonds to the banks, with the bonds themselves counted as banking reserves; the obligation to pay interest on these certificates of indebtedness is to a hard-pressed government a trifling consideration that will not check the process once it gets under way. In the last analysis protection against inflation must come from attention to economic essentials rather than from preoccupation with purely mechanical details, since no carefully erected legal barriers can stand up against the storms that sweep a badly disorganized system. It

therefore seems justifiable to assume that, given an economy whose salient characteristic is exactly the fact that the monetary authorities are under a mandate to control the volume of consumer spending, there is no insuperable objection to government paper money from a social point of view.²⁹

On the other hand, the need to rely on this method is hardly likely to be great, and may indeed never arise at all.³⁰ If those with large quantities of money in their possession are unwilling either to spend it or to lend it at the rate of interest the monetary authorities have decided to maintain, and if in such circumstances government is reluctant either to make lending obligatory or to tax money balances, the issuing of noninterest-bearing notes may be the best way to meet its responsibility toward consumer spending and the monetary circulation generally. Like borrowing from the banks, however, this may put government to the trouble of contracting expenditure later on to offset dishoarding. For unless the banks are canceling money in connection with the retirement of debts owed to them at the

29. The present legal position is another matter. While the Constitution gives Congress the power "to coin Money" and "regulate the Value thereof" (article 1, section 8), it appears that a proposal to permit the Federal Government to issue its own notes was voted down at the Constitutional Convention; see Harry Scherman, *The Promises Men Live By* (Random House, 1938), pp. 333-334, 335 n. If the Constitution requires amending in this particular, the change is justified by the fact that the importance of assuring social control over the *value* of money, i.e., the price level at which economic activity takes place, is now matched or exceeded by the importance of assuring social control over the *volume* of this activity.

30. Excess reserves of member banks were estimated on August 28, 1940, at \$6,490,000,000 (the *New York Times*, August 30, reporting weekly Federal Reserve bank statements), indicating the possibility of an enormous expansion of the quantity of money through the banking mechanism under existing reserve requirements. And the latter rules are of course in no sense final.

same rate that government is issuing its notes, the initial result will be a rise in the total quantity of money outstanding.

The Problem of Quantitative Estimates

It is difficult to generalize about the probable effect of a full-employment policy on the quantity of money in the system and the size of the public debt, since everything hinges on the financial methods elected. The quantity of money will depend on liquidity requirements—more or less as these are viewed by the money-holding public, although government might modify prevailing views by taxing money or by exerting pressure to bring it to the Treasury in the form of loans. The state of the public debt will depend on what, for all its importance, may be called a convention. That is, it will depend on whether government claims and exercises its prerogative to create money on its own account in certain circumstances or whether it sticks to the rule of “sound finance” and borrows, if need be, from the banks. Many of the other quantities involved are subject to the same type of uncertainty.

The National Resources Committee's estimate that the man power available in 1938 would be fully absorbed at a level corresponding to an annual consumer *income* of 88 billion (1936) dollars³¹ might be taken as a point of de-

31. In 1929 dollars, 105 billions, *Patterns of Resource Use* (U. S. Government Printing Office, 1938), p. 33. Compare with this the findings of (a) The Brookings Institution (Edwin G. Nourse and associates, *America's Capacity to Produce*, and Maurice Leven, Harold G. Moulton, and Clark Warburton, *America's Capacity to Consume*, both 1934); and (b) the New York Housing Authority, *Report of the National Survey of Potential Product Capacity*, 1936 (summarized in Loeb and associates, *The Chart of Plenty*).

parture in working out an advance estimate of the amount of consumer spending necessary to secure full employment in the United States today. It would also be useful to know within close limits to what extent the mechanisms of public finance would have to be thrown into action to secure fulfillment of a guarantee of the amount deemed to be necessary initially, if government were to give such a guarantee. Since so much would depend on the spirit with which the situation was approached, as well as on interest-rate policy and other variables, it is perhaps doubtful whether any of the existing estimates of savings and so on would be very helpful. It would seem unsafe to assume that the increase of payments into and out of the Treasury would be small. But the writer has no estimates to offer.

Monetary Principles of a Full-Employment Market Economy

THE distinction must be kept clear between such questions of monetary policy as have optional answers and the monetary principles that should be preserved intact to assure full employment in a system of production for market. A number of questions in the former category have now been discussed, and it seems well to return in conclusion to broad principles.

In the first place, it appears obviously essential for full employment that the monetary system be recognized as an instrument to be used for social purposes. This means that money should be definitely subordinate to organized society, rather than society subject to the tyranny of special monetary conventions—conventions regulating the issue of money in accordance with the scarcity or plenty of pre-

cious metal within the country, the rate at which private debt might be incurred at the banks, and so on. There is probably little room for dispute over this general proposition.

In the second place, the analysis made in this book suggests that the monetary operating principle most consistent with full employment on the one hand and the decentralized initiative of production for market on the other, and therefore for practical purposes the most important single monetary operating principle for a full-employment market economy, would be the advance determination, through government underwriting, of the volume or rate of consumer spending.³² The emphasis herein given to this point appears to be in some respects novel, although few would deny the less specific proposition that a sufficiency of purchasing power is of fundamental importance.

The principles in accordance with which production would be financed, assuming such social control over consumer spending, would be perfectly familiar. From the standpoint of producers for market, the rule would be that money would be raised (indebtedness incurred, by short-term or long-term borrowing, or "risk money" solicited) wherever and to the extent that the existence of a prospective market for products made this appear to be a profitable step; or, more generally, money would be raised as suggested by a comparison of anticipated costs and anticipated returns for different levels of output. The corresponding rule from the standpoint of the banking system would be that the legitimate needs of business should be accommodated without restriction, that is, that loans should

32. With the trend in the amount to be spent in consumer markets from year to year decided with reference to price-level policy—e.g., with the end in view of holding the price level steady—as noted.

be made wherever the prospective borrower appeared to be a good risk.

Partly in order to make certain that no hindrance to production would arise from the side of the banks or the loan market in general (as opposed, that is, to the limitations enforced by the state of the demand for products), and partly in order to assure fulfillment of the guarantee with regard to consumer spending and permit expansion of public works and resort to any other secondary measures against unemployment, government would have to have final control over the amount of money to be advanced to producers or to consumers in the aggregate. This is not meant to imply discretionary action on the part of the public monetary authority or agency, but rather mandatory action, in fulfillment of national policy as laid down by Congress, taken on the basis of information provided by the indexes of consumer spending, employment, and so forth.

In theory, the result required might possibly be achieved with the banking system completely independent of the public monetary authority in fact as well as in law, with the banks declining to buy government obligations, and with the banking system itself not sufficiently integrated to be able to develop and put into effect a consistent national policy. That of course is far from the present state of affairs. But in that situation government could make the needed marginal adjustments in the stream of money payments by issuing and canceling noninterest-bearing notes, which would be put into circulation by loan or subsidy and withdrawn by borrowing or taxation.

Or, toward the other extreme, a combined banking and fiscal mechanism can be imagined, constituting a single, unified bookkeeping department for the economy—an arrangement having some advantage from the standpoint of

simplicity. Here the central banking authority at least would become identified with the Treasury Department.

Our historically demonstrated preference for checks and balances, including monetary checks and balances, suggests that some suitable middle ground might be preferred. Thus government might achieve the socially necessary monetary ends partly by way of influence exerted upon the banks, through or in parallel with the board of governors of the Federal Reserve system, and partly by way of supplementary operations of a borrowing-lending character, etc., carried on directly with production enterprise or with individual consumers by public agencies.

The Federal Reserve authorities would consequently retain their present instruments of control over the circulation—rediscount rate, open-market operations, variable reserve requirements, variable margin requirements, publicity, moral suasion, and so on—and might well extend the range of their influence, assuming an expansion of the Federal Reserve system to include a higher proportion of the nation's banks. It is perhaps questionable whether all of these instruments of control would under the circumstances retain their present significance. Whereas under existing conditions all of them taken together are insufficient to maintain full employment, the introduction of direct social control over the volume of consumer spending might cause some of them to atrophy from disuse. However, those employed to guard against excessive use of funds for speculation and against excessive expansion, in unusual circumstances, of bank credit in general would probably still be important.

Part Four

Conclusion

Chapter IX

Ends and Means

IF this country is to abolish unemployment once and for all, there must first be on the part of most Americans a recognition of the importance of the goal, a general understanding of the means required, and a willingness to adopt those means.

It has been argued in this book that full employment can be assured either by a system of planned production or by appropriate monetary controls in a market economy, and the analysis has shown in what respects primarily, if we had that assurance, our economic procedures would be different from what they are today. In conclusion the reader may be reminded of certain points that bear on the practical problem of action.

The average person will naturally be deeply interested in knowing the secondary effects of full employment. How much change is necessary to secure this desired end? If jobs are assured to all who are willing and able to work, how different will the situation of the individual be in other respects from what it is now? To the extent that it will be different, will he gain more freedom of action or will his freedom of action be circumscribed by new limitations?

The answers to such questions depend to a considerable extent on the kind of full-employment economy intended. An economy operating under a comprehensive production plan will be unlike a market economy, even though the latter will be bound to have sizable elements of directly planned production in it and though conditions can be

imagined in which the two procedures themselves would tend to converge.

For historical reasons at least an economy retaining production for market can be expected to appeal to Americans right now a good deal more than an economy with an overall production plan. A system of planned production is something of an unknown quantity. Against the wastes that production planning avoids through its ability to eliminate duplication, minimize selling costs, generalize the best available processes, and so on, must be set the costs of the informational machinery required to assure that the plan will be drawn up and continuously adjusted so as to produce what the public wants, and, more important, the costs of administering the plan as drawn, i.e., the costs in terms of bureaucracy at the center and sacrifice of progress through loss of individual managerial initiative. Largely because of the difficulty of assessing this last factor without either over- or underestimating it, no convincing balance that takes account of all of these factors appears to have been struck as yet. On the other hand, production for market is familiar already through long experience, and the changes involved in establishing a full-employment market economy will evidently be the minimum changes with which unemployment can be permanently abolished.

Fortunately it is not necessary to transform the whole economy or else lose the main benefits of production planning. After all a market economy is not one that gets along without planned production in cases where the latter is obviously the best method of providing a needed commodity or service. It is simply an economy in which the burden of proof is on those who claim that the planned-production procedure should be adopted in any particular case. This

statement should be qualified to allow for the fact that emergency planned projects will be operated from time to time to take up slack in the system temporarily. By and large, however, having once established the conditions for a noncontracting aggregate market, society can draw the line between planned production and production for market wherever it chooses, without the hope that an expansion of the former will increase total production, or on the other hand the fear that it may as the result of its repercussions cause total production to shrink. Naturally for the best results account should be taken of the disturbing effect of uncertainty as to which areas are going to be occupied by planned production. The more definitely the boundaries of these areas are marked out in advance, the better.

Production for market need not in every case imply production for sale to individual consumers (any more than planned production need preclude such sales), since it is possible for government to buy products from market enterprise with the proceeds of general taxation and let the public have these products "free." Sometimes—especially while unemployment is being eliminated to begin with—the decision to increase the free distribution of goods and services can be expected to be based on a deficiency of certain types of consumption among low-income groups. For example, this might well be true of medical service. On the other hand, after full employment is once attained, further expansion of the free list is likely to be based on the calculation that demand for the good or service in question is relatively inelastic, so that to make it available free of charge will serve convenience but will *not* greatly expand the use of that product and hence not require the release of factors of production from other employments.

Ricardo's System, America Today, and a Full-Employment Market Economy

It is of interest from the standpoint of the broad theory of economic systems that a full-employment market economy will resemble the world of present-day American experience, not the hypothetical world of Ricardo and the classical economists, so far as concerns the nature of the individual producer's markets, but will resemble the Ricardian and not the actual world in possessing a stable total market at a level ruling out any involuntary idleness. On the one hand, competition will be largely imperfect or monopolistic rather than perfect or pure competition; for it can be assumed that product differentiation¹—the thing that tends to make competition monopolistic in the first place—will for the most part persist except where production planning is introduced. On the other hand, curtailment of any particular production will imply expansion of some other kind of production rather than a shrinkage, or possible shrinkage, in the general aggregate of economic activity.

No special novelty will necessarily be introduced in the operation of the market for consumer goods, the factor markets (capital goods, labor, and land), or, subject to qualifications reviewed below, the money market (securities and short-term loans). In other words, the present problem will remain of securing as automatic a functioning of these markets as possible, while at the same time preventing distortions due to monopoly and excessive speculation.

1. "Product" must be interpreted as including the satisfaction or lack of it felt by a buyer in trading with a particular seller, as well as the merit, real or fancied, attaching to a particular brand name.

As is generally recognized, the element of monopoly in production tends to bring about an uneconomic allocation of society's efforts, the monopolistic units holding their output below the level corresponding to the social optimum.² In ordinary cases of monopolistic competition among enterprises of moderate size, attempts to improve on the natural course of events would very likely cost more than they were worth in terms of the slightly better results theoretically obtainable. That is, when account is taken of the burden of regulatory measures themselves, allocation is likely to be less distorted without such interference. Stated differently, a good deal of price "administration" appears to be not only thoroughly ingrained in the American economy but also, practically speaking, harmless. But the same cannot be said of cases where real monopoly power exists, that is, power to exclude rivals from the market. Here the proper balance in allocation is likely to be seriously upset.

There are furthermore certain other basic problems indissolubly connected with the existence of monopolies, and a full-employment market economy will have to contend with these also. For one thing, it is difficult to secure a normal rate of return to competitive enterprise when the necessities of life are controlled by a small number of business giants. A stable relationship between the volume of anticipated consumer spending, the rate of money wages, and employment depends among other things on stability in the aggregate amount of profit required to motivate production. Hence if there is a trend toward more monopoly, enabling a small number of producers to skim off an increasing amount of profit over and above normal net interest on the sums invested, this will operate in the direction

2. Cf. chap. iii above.

of discouraging other enterprises and contracting production for market as a whole unless measures are taken to change the relation of business returns to business costs so as to expand the aggregate profit share. Moreover, quite aside from any *increase* in monopoly, it is evident that the profits of monopoly help to create large income inequalities, and, whether or not these are held to be socially undesirable on their own account, they certainly tend to result in the saving of large sums of money that might otherwise be spent, thus complicating the problem of realizing any specified volume of consumer spending. As we have seen, it is possible to maintain consumer spending in any case; nevertheless it is a safe generalization that fewer difficulties will arise if there are no disproportionately large individual holdings of money requiring to be offset or else coaxed back into the monetary circulation. Finally, due note must be taken of the danger to genuine political democracy inherent in concentrated private economic power. That this may transcend all other considerations can readily be appreciated. For example, if concentrated private economic power prevents government from establishing quantitative monetary control, then it is useless to look for assured full employment—together with democracy—in any case.

It follows that, after as well as before establishing full employment, society will stand in need of policies capable of preventing monopolies from conflicting with the public interest. No part of the analysis in this book is intended to imply the contrary.

A good way of visualizing the connection between the monopoly problem and the problem of ending unemployment is to think of how prices might react upon the first adoption of a "national income insurance" plan. Undoubt-

edly such a plan will require an initial rise in total consumer spending above its previous level. Will not monopolies defeat the purpose of the program by raising their prices and thus preventing the desired increase in the volume of production and employment from materializing?

The answer to this question appears to be as follows. First, full employment *could* be secured even though monopolies by raising their prices absorbed the entire addition to consumer spending. But this would involve a large supplementary expansion of planned production supported from the budget (or, of course, special stimuli to business such as subsidies and tax remissions). Second, the assumed rise in monopoly prices could be prevented from raising the price level as a whole, because the output of the supplementary planned production, instead of being supported from the budget, probably *could* be sold to individual consumers, thus increasing the total volume of marketed consumption output in step with the number of dollars of consumer expenditure. But this would be a Pyrrhic triumph, for it would reduce the sales receipts of competitive producers, forcing a contraction in that part of the economy and thus sooner or later necessitating additional measures, such as a further expansion of planned production charged to the budget. Therefore, finally, if what is wanted is full employment through controlled expansion of *production for market*, the only sensible procedure will be to face directly up to monopolies and take steps to prevent monopoly prices from rising when "national income insurance" goes into effect.

Probably the issues presented by monopoly can best be approached from a number of different angles simultaneously. When the public has the facts, it may be possible to induce enterprises with monopoly power to administer

their prices in the interests of volume sales. If consumer coöperatives extend the field of their operations, competition between them and private producers should do much to hold down monopoly prices and profits. Trade unions can bring pressure to bear on large corporations where the latter inadequately appreciate their social responsibilities. Public regulation of prices, revision of the patent laws, public "yardstick" plants, and the restoration of more vigorous competition through active enforcement of the anti-trust laws all seem to have an important place. As previously suggested, in certain types of situation accounting regulations might be imposed that would simulate the results obtained under pure competition by expanding production up to the point of equality between marginal cost and price. And so on. Naturally, however, in given cases abandonment of production for market in favor of planned production under public ownership may finally recommend itself as the best solution.

A full-employment market economy will also inherit some of the problems connected with speculation—which in one sense represents the quintessence of the perfectly competitive market principle. By and large speculation acts in the direction of producing the price movements anticipated by the speculators, so that it tends to reverse those movements that are believed to be in the nature of temporary deviations above or below a stable norm, and to accentuate those believed to represent the early stages of a one-way trend. From the standpoint of equilibrium pure and simple, therefore, it might be considered a desirable phenomenon in the former type of case and undesirable in the latter. But the issue will in all probability be somewhat more complicated. For example, if society decides to bring about a steady decline in the rate of interest, speculators

who disbelieve in the possibility of accomplishing this might cause the monetary authorities some difficulty by holding large sums of money idle in anticipation of a later rise in the rate. In general, speculation will probably lose a good deal of its importance when the volume of consumer spending comes under social control. If it still proves capable of markedly affecting, by sympathy, the volume of business enterprise, additional limitations on the credit available to speculators can always be imposed through the banking system. For reasons suggested previously, it will perhaps be necessary to place restrictions on speculative purchases and sales of foreign exchange.

Let us now consider, by contrast, in what essentials the theory and practice of a full-employment market economy will differ from the practice of our present economy and the true theory of it. In the Ricardian plan of a noncontracting economic system, which generations of economists have insisted in the face of the facts resembles the real world, it is always a question of producing this thing or the other thing, and never a question of producing this thing or nothing at all. It is important to observe that the former will at last turn out to be the real alternative, once full employment is deliberately organized.

This is by no means a matter of academic interest only. Practical policy cannot fail to be affected by the distinction in a number of important ways. Where capital formation and the production of goods for immediate consumption are between them bound to keep the whole available labor force employed, the traditional analysis of the sacrifices and merits of thrift acquires real social meaning. At the same time the price level will respond to changes in the quantity of money as suggested by the quantity theory—i.e., the two will tend to vary directly except for possible

increases or decreases in the desire to hold cash balances (which may be interpreted as velocity changes) or in the prevalence of nonmonetary transactions. Moreover, with consumer spending predetermined, the volume of employment offered by production for market will stand in inverse relation to the net rate of money wages paid by employers. In the matter of foreign trade, the arguments for free trade will no longer be weakened or vitiated by the possibility that there may in practice be no substitute industries to take the place of the industries unable to stand without special protection. In short, the dynamics of the economy will differ from the present dynamics, and, broadly speaking, although full *laissez faire* will not be reintroduced, there will be a correspondence between the facts of experience and the rationale associated with the writings of the classical economists.

This change will certainly make for more freedom of social action rather than less, since one of the outstanding features of a contracting-expanding economy is evidently the necessity under which it places those responsible for public policy to sacrifice almost every other consideration to shifts of all kinds adopted in the hope of avoiding a shrinkage of markets. Freed from that incubus, society can proceed to settle its various other economic problems on their own merits.

For example, a full-employment economy will not be bound to a protectionist policy by a real or assumed need to maintain jobs in given, existing industries. That is not to say that free trade will forthwith acquire magical properties that never did or will belong to it except in the minds of extreme partisans oblivious to long-run and "noneconomic" considerations. It will still be necessary to interpret net advantage in broad perspective—and therefore to

weigh the advisability of supporting certain high-cost "infant" industries and certain other kinds of production that will be expensive in relation to the cost of importing but valuable to the home economy from the standpoint of national defense. It will be important also not to remove existing import duties so suddenly that the inefficient industries whose markets will then be invaded will shut down more rapidly than it is physically possible for others to expand. And, considering both the uncertainty connected with all international dealings and the amplitude of possible fluctuations in the demand on the world market for particular home products, there will doubtless be room—even where unilateral tariff reductions would of themselves bring a higher real income at home—for "horse trading" in the form of the withholding of concessions to foreigners until the latter agree to offer concessions in return. However, while the necessary qualifications must be admitted, the public interest will in general be served by the removal of restrictions on imports, to the end that goods may be brought in from abroad whenever their cost delivered is less than the cost of home production. For, full employment being assured in any case, this will result, by way of a re-allocation of production factors, in a higher domestic standard of living. It is clear, therefore, that a full-employment market economy will have a big incentive to take the lead in restoring and further expanding the volume of international trade.

On the other hand, this impetus toward liberalization of international transactions will probably not apply to foreign lending, which, as we have seen, is likely on the contrary to be placed under certain restrictions. Suppose, for example, a flight of capital were to begin. It would be surprising if a nation, after taking its own economy in hand to

the extent of providing job security for its inhabitants, would then be willing to make its own monetary task difficult or invite international political complications by failing to check this flight of capital.

Workers, Entrepreneurs, and Income Savers

A LARGE part of the foregoing discussion has dealt with concepts that are more familiar to statesmen and economists than to others. Let us therefore now reduce the characteristics of a full-employment market economy to the common terms of individual experience—the experience of the person who works for an employer, the person who is an entrepreneur or business proprietor, and the person who saves out of his income but does not himself actively employ his savings in production.

For the worker it seems clear that there will be nothing inherently different in the mechanics of such an economy from what is already met with every day. The decisive fact will be that everyone wanting to work and not actually incapable of working will be assured of finding a job—the most desirable jobs tending to go as usual to those best qualified to fill them, but the elimination of poverty creating more equality of opportunity to qualify. The bargaining position of labor as a whole will be greatly strengthened by the absence of unemployment.

The category of entrepreneurs is hard to delimit precisely, since it may be taken to include such widely different groups as farmers and small business proprietors, independent professionals, inventors, financial promoters, speculators, stockholders, top business executives working partly on a salary basis, and directors and others in control of the policies of large corporations. At one end the entre-

preneur shades imperceptibly into the salaried executive. The small stockholder, on the other hand, has in practice a great deal in common with the bondholder or anyone else who allows his funds to be put to work by others. And from the standpoint of their relation to the economy as a whole the various types of enterprise and initiative ranged in between show considerably less homogeneity than pertains to those who work for wages and salaries.

However, it will probably be agreed that all those who either work for a return that is not fixed in advance but depends on the success achieved in marketing some product (whether it be literary output or copper wire), or who advance money for such a return (thus supplying "risk money" to production), or both, constitute society's entrepreneurs. Moreover it will hardly be disputed that, while the ability to originate, the ability to organize, and the ability to administer are bound to be at a premium in any economic system, being always scarce in relation to the demand, a decentralized system of production for market especially favors the development of these dynamic talents.

It follows that a full-employment market economy should provide as fertile a field for enterprise as can be conceived of in a mature society. For under those circumstances—with business acumen still required to forecast the *demand for particular products*, but with uncertainty about the size of the *total demand* eliminated—the entrepreneur can always go ahead in the knowledge that, with merely average skill and average fortune, he will secure a return equal to that obtainable on services and money hired out to someone else. There will, however, be a real price exacted for the absence of slumps, or periods of abnormal losses so familiar at present, since periods of feverish boom activity and abnormal profits will also be absent. Moreover

the drive to curb the excesses of speculation and monopoly will undoubtedly be strengthened rather than weakened, if only because these excesses could complicate the problem of maintaining the conditions for full employment, as already noted. But since this drive has long been mobilizing business support around its banners of legitimate business and fair competition, most entrepreneurs can be expected to regard its progress with satisfaction rather than dismay.

Consider finally the position of those who save but are not actively employing their own savings in production, choosing instead either to lend them to others by acquiring securities, life insurance, savings accounts, and so on, or to hold them inactive—on demand deposit in a bank or possibly in the form of currency. (Of course often these same persons are also entrepreneurs or workers.)

There is no reason why the individual citizen, or business management, will necessarily experience any loss of freedom of action in the disposal of unspent money. On the contrary, matters can be expected to stand as before—*provided only* that conflict between social and private interests does not arise out of large-scale hoarding, based on unwillingness on the part of the holders of money to lend it at the going rate of interest, or out of a sudden rush of funds into foreign investment in search of a higher return abroad.

Theoretically government could establish a domestic rate of interest completely satisfactory to those individuals and corporations in a position to save large sums of money, since it could borrow for transmittal to consumers the amounts by which the savings attracted by this high interest rate exceeded what production could afford to borrow on such terms for purposes of capital formation. But full employment would then involve a heavy emphasis on con-

sumer-goods production relative to construction and to capital-goods production generally—as well as comparatively heavy public charges for servicing the public debt—and it is not clear how public advantage would be served by a policy delaying the rise in the standard of living by making it difficult to build better equipment for future use.

In the face of a wave of hoarding generated by a low interest-rate policy, government could still maintain consumer spending and secure adequate accommodation for production borrowers at the prevailing rate through the creation of new money. And an unexpectedly large amount of foreign lending could be prevented from creating unstable boom conditions by a manipulation of the taxes directly affecting production; or it could be taken care of in advance, as previously noted, by having the rate of consumer spending itself made conditional on the balance of payments on current account. Beyond a certain point, however, preventive measures seem likely to be preferred to compensatory measures, both because of the further problems raised by the required compensatory measures at the time and also because of the aftereffects invited—dis-hoarding, international political repercussions, and so forth.

In short, the position of the saver of money in a full-employment economy needs to be stated in conditional terms. Ordinarily he can expect to be exactly as unrestricted in the disposal of his savings as he is today. There may, however, be times of stress when he will be unable to obtain foreign exchange for the purpose of investing abroad and when large cash balances at least will be taxed or automatically borrowed by government.

From the standpoint of extreme individualism any such tampering with the right of private parties to do exactly as they see fit with their own money—that is, their right to

send it out of the country or hold it out of use altogether until such time as it seems likely to earn them a return satisfactory to themselves—may be regarded as plain arbitrary seizure. Similarly with any issuing of government paper money, although the seizure here is more roundabout. Indeed similarly with any governmental monetary management whatsoever, since in the last analysis the only money system completely under individualist control is a really “automatic” system composed of money with intrinsic value, such as gold. All of this must surely be admitted. The point, however, is that there are other people to be considered besides the inert individual (economically speaking) who will neither spend nor invest, except on his own terms. And these monetary measures wear a vastly different appearance when viewed in the light of a social decision that no one willing and able to work should be deprived of that opportunity.

Some Political Considerations

THE political feasibility of permanently abolishing unemployment will be underestimated if the “national income insurance” idea is neglected. For this particular procedure can make a very wide appeal.

In the first place, this technique makes it possible to protect the decentralized production initiative and control to which we have become accustomed, and to keep government interference at a minimum.

Just so long as private enterprise gets along satisfactorily by itself, as indicated by the fact that it is of its own accord issuing purchasing power at a rate that maintains full employment without upsetting price levels, the public monetary authority will be a passive bystander, taking no action

at all. That makes it hard to claim that the consumer-spending guarantee involves unnecessary government meddling, unless one regards full employment itself as unnecessary. And when on the other hand conditions are such as to require the assistance of public finance to keep unemployment from developing, the government spending will take a form in which it can be expected to encounter as little opposition as possible. Business itself, it seems safe to say, will not be unalterably opposed to the principle that the final markets for its products should be supported. Certainly such support will be welcomed by comparison with an indefinitely large expansion of planned public production.

This is not to say that there is no place for special inducements in the form of government contracts or subsidies—which will doubtless be even more popular with the immediate recipients than a guarantee of consumer spending in general—or for public works and other forms of publicly organized production. Both types of approach may be called for either by general policy or by the need for special mechanisms of stabilization. It is an open question whether certain economic services should not now be permanently planned and administered by government instead of remaining in the halfway position of private enterprise publicly regulated. So far as concerns a flexible planned program of public employment, such a program will be favored by most people if the projects are of genuine social utility, do not compete with business for the buyer's dollar, and are prevented by public control over the rate of interest from raising the cost of borrowing for business purposes; indeed in these circumstances it is likely to encourage rather than merely supplement private enterprise, especially if it results in additional government con-

tracts for building materials. A policy of granting special subsidies and tax rebates is, to be sure, likely to involve political favoritism and Congressional logrolling (as is true also of government contracts), besides tending to create a sense of permanent government responsibility for preventing the bankruptcy of uneconomic enterprises. But these difficulties can perhaps be minimized if the subsidies, etc., are linked to production expansion in a way that enables large numbers of producers to qualify to receive them,⁸ or if they are employed to bring the products of particularly important decreasing-cost industries, like electric power, to large numbers of new users. In short, there is no reason to lose sight of the fact that production expansion can be advantageously secured in various different ways. Nevertheless it seems clear that these two general techniques for increasing or stabilizing the volume of economic activity—subsidies, etc., and planned production—will be most likely to commend themselves to the public when, owing to the direct maintenance of purchasing power, it is possible to give them relatively subordinate parts in the general scheme of things.

3. The principle of subsidies for expansion has been embodied in several bills submitted to Congress, notably the Industrial Expansion bill of 1937 (H.R. 7332, U. S. 75th Congress, 1st Session) and the Monopoly Control bill of 1939 (H.R. 7504, U. S. 76th Congress, 1st Session), both introduced by Representative Voorhis. The former measure was based on the "AAA in reverse" idea outlined by Mordecai Ezekiel in *\$2500 a Year* (Harcourt, Brace & Co., 1936), according to which processing taxes levied on producers in major industries would be used to pay benefits to concerns entering into contracts with the Federal Government to expand their outputs by specified amounts. Under the Monopoly Control bill the Federal Government would underwrite the sales of businesses in participating industries, i.e., interstate major monopolistic industries and voluntarily participating major competitive industries, by having a Production Insurance Corporation buy at fair prices any unsold output coming within the minimum quota agreed on for each such business.

A second reason why the idea of having government underwrite total consumer expenditure is capable of winning broad popular support is that that arrangement automatically prevents a runaway price inflation.

This statement is perhaps incautious. Monetary proposals are commonly believed to carry, and often do carry, the threat of shipwreck on the rocks of inflation; and it should probably be conceded that all monetary programs whatsoever contain this threat in the sense that management may become mismanagement. However, an advance determination, based on the desired price trend, of the volume or rate of consumer spending, followed by mandatory fulfillment of the guarantee given, means that excessive spending will be prevented by taxation at the point of consumption or otherwise just as much as deficient spending will be forestalled by distribution of additional income or otherwise. So long as this procedure is followed, undesired changes in price levels can occur only as the result of unexpected changes in the economy's capacity to deliver output on a full-employment schedule. It is hard to imagine conditions today under which uncontrolled inflation would be more surely prevented.

If a plan to set about ending unemployment by means of "national income insurance" and related measures reaches the stage of practical discussion, it seems clear that, because government spending itself is popular rather than otherwise, opposition will concentrate to a large extent against permitting government to have access to such funds as fulfillment of the program may require it to spend. This is not so much because monetary questions are of paramount importance in themselves. Rather it is because a program of that kind makes of the monetary-fiscal apparatus the instrumentality through which the ultimate guarantee that

society's work will be performed comes to be the force of public opinion instead of the lash of starvation and insecurity, and hence the instrumentality through which some change is sure to be brought about in the underlying distribution of power and wealth in society.

Against taxation (for example, taxation of money balances) it is only natural that those affected should protest. Against public borrowing it will be said that this means heavier taxation later on, or conceivably a partial repudiation in the form of deliberately induced inflation. Borrowing will furthermore be resisted with the parallel argument that the rising public debt endangers government's credit. That argument will be partly premature, since sound public accounting will show that some of government's expenditures yield corresponding capital assets and should therefore not be reckoned as unbalancing the current budget.⁴ It will also be partly circular, since government's credit in the domestic loan market can be impaired only if those who manifest such concern for it decline to lend government their money. Nevertheless these objections can be seen to be reasonable from certain points of

4. This applies to outlays for self-liquidating public works—a toll bridge, for example. The problem of outlays for nonself-liquidating or nonrevenue public works—e.g., a courthouse—is more complicated. Here it is perhaps best to count all expenditures in the regular budget for the year in which the expenditures are made, except to the extent that tax revenues will clearly be enhanced as a direct result of the improvements in question (very likely a minor consideration once the volume of consumer spending is stabilized by being determined in advance). Account can then be taken of the acquisition of these socially valuable assets in a separate statement supplementing the budget proper. (Parenthetically it may be noted that if large revenues are anticipated from self-liquidating public works, they become a factor to be reckoned with in calculating the desirable aggregate of consumer spending in subsequent years, since they necessarily constitute a deduction from the amount to be spent by consumers for the output of production for market. Cf. above, pp. 177-179.)

view. The issuing of noninterest-bearing notes will be opposed especially by members of the financial community, whose preference for having government unable to put money into circulation without borrowing at interest from them is perfectly understandable, and it will probably appear to a much larger number—in spite of all argument to the contrary—to be somehow a peculiarly inflationary process. On the other hand it will have in its support a long-standing tradition of native American agitation in favor of returning the money power to the hands of the people.

No matter what fiscal methods, or other methods, government proposes to use in behalf of full employment, it would be idle to suppose that misunderstanding, reasonable differences of judgment, self-interest, and sheer prejudice will not raise up a formidable opposition. Indeed it is likely that a political party setting out to abolish unemployment and yet retain democracy will eventually see its efforts defeated unless it possesses to begin with an understanding of public opinion enabling it to find the formula that will really command the broadest popular support, and then moves with resolution in the light of that understanding, shunning the half-measures that, powerless to put an end to depression and idleness, will seem to the nation too high a price to pay for any lesser benefit.

Index

ABSTINENCE, in interest theory, 51 n.

Acceleration principle, 125

Accident, industrial, 30, 31, 34

Accounting practice, lack of uniformity in, 77-78, 148, 153, 163

Adams, Cornele Berrien, *National Industrial Organization (Under Social Control)*, 220 n.

"Additional" workers, 18 n., 53-54

Administered prices. *See* Prices

Advertising, 59, 67, 73, 107, 161

Aggression. *See* Foreign policy

Agricultural Adjustment Administration (A.A.A.), 66, "A.A.A. in reverse," 270 n.

Agriculture. *See* Farmers

Alexander Hamilton Institute, 17

Aliens, 7, 7 n.

Allocation problem. *See* "Optimum allocation"

Altman, Oscar L., 201 n.

American Federation of Labor (A.F. of L.), 17, 19 n., 20, 21, 39

American standard of living, 131

Amortization, 172

Anderson, Benjamin M., Jr., 93 n.

Anticipated consumer spending, Anticipated costs and returns. *See* Consumer spending; Costs and returns

Anticipations, of price changes, 142, 154, 156-158, 160, 169, 172-173, 196, 206

Antitrust laws, 260

Armaments, 1, 44, 103, 178-179, 179 n.-180 n.

Artists, 98, 109

Atomistic market action, 59, 80, 83, 198, 199, 200

Automobile industry, 197; and consumer credit, 180

BALANCE of payments, international, 4, 141 n., 175, 185-194, 267

Balance of trade, 4, 190, 193

Balances, cash *See* Money; Hoarding

Banking and government, relations between. *See* Government and banking

Bank reserves. requirements, 202, 202 n., 245 n., 250; excess reserves, 235, 245 n.; fractional reserves, 236 n., 237; 100 per cent reserves, 203 n., 236 n., 242 n.-243 n.

Bankruptcy, uneconomic avoidance of, 124 n., 270

Banks: commercial banks and the money supply, 202-203, 213-214, 237, 245-246, problem of the nature of the commercial banking process, 235-236, 236 n., 242 n.-243 n.; financial intermediaries to transmit savings, 182, 201, 213, 234, 241; capital credit banks, 241 n., bank loan principles in a full-employment market economy, 248-249; instruments of control by central banking authorities, 250, open-market operations, 93 n., 241, 250; interest rate, 209 n., 240-241, 250; control of speculation, 160, 250, 261

Bargaining, collective. *See* Collective bargaining

Bargaining power: of employers, in nineteenth century, 6, 131; of la-

- bor, weakened by unemployment and strengthened by full employment, assuming democracy, 11, 33, 224, 264, 271-272
- Barter, 177, 177 n.
- Bastiat, 51 n.
- Berle, A. A., Jr., 241 n.
- Biggers, John D., 18 n.
- Birth rate, 21, 101 n.
- Bonds, 194 n., 205, 208, 215, 242, 265. *See also* Government borrowing; Government debt
- Booms. *See* Prosperity, Cycle
- Borsodi, Ralph, 177 n.
- Bottlenecks, 224 n.
- Brookings Institution, 246 n.
- Buchanan, Norman S., 36 n.
- Budget: views on balancing, 91, 134 n.; planned production and, 69, 105; production for market and, 177, 255; full-employment market economy and, 149, 230-233, 246-247; the problem of capital expenditures, 272, 272 n.; unrecognized nineteenth-century deficits, 131
- Building and loan associations, as channel for savings, 201
- Bullion, 5, 203 n., 214, 243
- Bureaucracy, 55-56, 110, 254
- Bureau of Agricultural Economics, 8 n.
- Bureau of the Census, 19 n.
- Bureau of Foreign and Domestic Commerce, 218-219
- Bureau of Labor Statistics, 20 n., 39
- Businessmen. *See* Entrepreneurs
- "Butter." *See* "Guns" and "butter"
- ment), 24, 57, 60, 96, 125, 128, 136, 143, 171, 174; defined, 194, 194 n., relation of rate of, to available savings, 122, 126; to expected future consumer demand, 122, 126, 135; to rate of interest, 128, 171, 195-196, 198, 200, 204, 209 n., 211; to anticipations of price changes, 122, 142, 154, 156-158, 160, 169, 172-173, 196, 206; to state of business confidence, 143, 154, 158-160, 169; to destruction by war, fire, etc., 196-197; to population growth, 6, 130-131, 196; to exploitation of new resources, 130-131, 196; to invention, 6, 94, 130-131, 155, 157, 164, 196-197; tendency toward uneven rate of replacement, 142, 154-155, 169, 197; desirability of having rate controlled by majority public opinion, 57, 60, 194-195, 211; methods of controlling, 105, 155, 198. *See also* Saving, rate of social
- Capital goods: defined, 154, 154 n.; problem of full utilization of, 41-42
- Capital goods industries, 24, 122, 125, 126, 136, 142, 143, 153, 154 n., 164, 196
- Capital market. *See* Loan market
- Carey, 51 n.
- Carrying costs for money. *See* Taxes
- Cart and horse of economics, 128-134
- Cash balances. *See* Money; Hoarding
- Catchings, 132
- Census: of employment and unemployment (1930), 16; of unemployment (1937), 18, 18 n.,
- C**ALL loans, 117 n., 242
- Cambridge school, 52 n., 144 n.
- Capacity to consume, 97-98, 246 n.
- Capacity to produce, 97-98, 246 n.
- Capital formation (physical invest-

- 20 n.; of unemployment (1940, preliminary), 19, 19 n.
- Central planning. *See* Planned production
- Chamberlin, Edward, *The Theory of Monopolistic Competition*, 42 n., 73 n.
- Charities, 69
- Checking accounts. *See* Demand deposits
- Checks and balances, American tradition of, 250
- Choice. *See* Consumer choice; Free choice of occupations
- Circulating medium. *See* Money
- Circulation of money. *See* Monetary circulation
- Civilian Conservation Corps (C.C.C.), 19 n., 38, 39
- Civil liberties, 14
- Civil Works Administration (C.W.A.), 38 n., 39
- Clark, Colin, *A Critique of Russian Statistics*, 101 n.
- Clark, J. B., 52 n.
- Classical economics, 3, 5, 5 n., 24, 26, 51 n., 91, 92-93, 128, 128 n., 256, 262
- Clearinghouse methods of settling payments, 177 n.
- Closed system, 184
- Cobweb theorem, 36 n.
- Coefficient of money transactions, 177 n.
- Cole, G. D. H., *Fifty Propositions about Money and Production*, 220
- Collective bargaining, 13, 31, 146
- Commercial credit, 215 n.
- Commercial paper, eligible, 203 n.
- Communal satisfactions, 59
- Communications, 76, 96
- Comparative advantages, law of, 3, 184
- Competition: as aspect of production for market, 110; preserved in a full-employment market economy, 26, 124, 265-266; world of perfect, 147; difficulties of, in an economy containing a large number of unregulated monopolies, 131, 148-149, 257-258
- Imperfect competition, 75
- Monopolistic competition, 36, 73-75, 107, 131-132, 256; excess capacity under, 41-42, 107, regulation, advisability of, related to presence or absence of actual monopoly power, 75, 257
- Price competition, 118, and trend of price level, 173 n.
- Pure competition, 36, 36 n., 72-73, 75, 131, 143
- Compulsory loans. *See* Government borrowing
- Conditions for full employment, contrasted with program, 23, 137-138
- Confidence, business, 6, 90, 124, 131, 143, 154, 154 n., 158-160, 169
- Congress, 7 n., 25, 229, 237, 245 n., 249, 270, 270 n.
- Congress of Industrial Organizations (C.I.O.), 17, 22
- Constitution, U. S., 8, 245 n.
- Constitutional Convention, and government notes, 245 n.
- Construction, 67, 113, 114, 155, 198, 201 n., 207, 211, 241 n.
- Consumer choice, 58, 104, 108; sometimes a burden, 59
- Consumer credit, 25, 141 n., 176, 178 n., 180-183, 191, 192, 210-211, 215 n.
- Consumer goods industries, 90, 125, 143, 153, 154 n.
- Consumer goods sold to individual consumers, contrasted with other

- final output, 25, 121 n., 141 n., 176-179, 203, 210-211, 232 n.
- Consumer sovereignty, 57-58, 104-107, 108, 198
- Consumer spending: defined, 121 n., 218 n.; contrasted with transfers of final output without payments by individual consumers, 25, 121 n., 141 n., 176-179, 203, 210-211, 232 n.; variability of aggregate, when not under control, 123, 129, 129 n.; estimates for U. S. (1929-38), 129 n.; importance of anticipated volume or rate, as regulator of volume of production for market, 24-25, 122-123, 125, 135, 143, 146, 157, 168-169, 231; possibility of accidental maintenance of adequate rate, 129, 133, 217
- Guaranteed volume or rate of consumer spending, through government underwriting, 12, 15, 24-25, 127, 135-136, 141, 168, 209 n., 248; advantage that need for direct intervention in production is minimized, 26, 136, 248, 268-270; advantage that excessive spending is avoided as well as deficient spending, so that price inflation is prevented, 12, 26, 171 n., 222-228, 271; criteria for determining size of guarantee in successive years, 25, 127, 169, 170-194; problem of information about current spending rate, 217-222; fulfilling the guarantee, 25, 137, 169, 170, 217-250; relation to problem of monopolies, 257-260. *See also* "National income insurance"
- Consumer tastes, or preferences, 143, 154, 161-163, 164, 174; affected by advertising, 59, 161; by convention, 59; by income distribution, 50, 161; new wants developed by leisure, 97
- Continental writers on economic policy, 5
- Contracting-expanding economy, 124 n., 262; full-employment market economy contrasted with, 26, 178-179, 256, 261-264
- Coolidge, President, 93, 93 n.
- Coöperatives, consumer, 13, 72, 260
- Cost of living, and money-wage rates, 171 n., 223-224, 224 n.
- Costs: production, 66; selling, 66, 73; average, 73; marginal, 73, 74; decreasing, 77, 106, 270; variable or prime, 71, 77; fixed or supplementary, 77; opportunity, 83; interproducer, 121-122; difficulties of measurement, 77-78; marginal, equated with price, 73, 74, 77, 77 n., 78, 260, production expense and purchasing power, the cart and the horse of economics, 128-134
- Costs and returns: equality between, for "optimum allocation," 48-49, 106-107, 110; comparison of, under planned production, 10 n., 68-69, 80-81, 95-96; under production for market, 10 n., 49-50, 68, 119-125, 248; anticipated *vs.* realized, 68, 68 n.; social *vs.* private, 49, 58, 81-83, 105 n., 106, reconciliation of differences between social and private, 82-83; costs of unemployment necessarily social, 60
- Cotton export markets, 3; mechanical picker, 166
- Coyaji, Jahangir, 100 n.
- Currency, 117, 117 n., 194 n., 195, 202, 214, 220-222, 241-242,

- 243 n. *See also* Noninterest-bearing notes; Money
- Currency wars, 8, 187, 188
- Cycle, business, 134 n., 155, 182 n., 265-266, theories of, 130, 130 n., 132, 133 n.
- DAHLBERG, ARTHUR**, *When Capital Goes on Strike*, 239, 240 n., 242 n., 243 n.
- Davenport, Donald H., 201 n.
- Decentralization of production decisions, under production for market, 10, 55, 78, 79, 110, 120, 268
- Decreasing costs. *See* Costs
- Defense, 2, 10, 22, 59, 83, 84, 90-91, 91 n., 96, 103, 105, 115, 177-179, 179 n.-180 n., 210-211, 263
- Deficit. *See* Budget
- Deflation, 8, 93 n., 124 n., 186
- Demand, total, *vs.* demand for particular products, 265
- Demand curve, with and without monopoly, 73 n.; normal curve inapplicable to labor market, 145
- Demand deposits, 117, 117 n., 194 n., 195, 202, 203, 214, 235-236, 236 n., 241-242, 243 nn.; possible advantage of segregating business and income deposits, 220-222
- Democracy, 14, 34, 53, 57, 95, 103, 104-107, 110, 208, 258, critical test of, in abolition of unemployment, 11-14, 273
- Democrats, 124 n. *See also* New Deal
- Depletion, 150 n., 201 n.
- Deposits. *See* Demand deposits; Savings deposits; Time deposits
- Depreciation, 197; allowances for, 121 nn., 142, 150, 152-153, 160, 200-201, 201 n.
- Depressions, 12, 42-43, 54, 93, 130, 134 n., 155, 265
- Derived demand, 125, 143
- Destruction of capital goods, by war, fire, etc., 196-197
- Devaluation, monetary, 8, 187
- Dewey, Thomas E., 91
- Dewing, Arthur S., *Corporation Finance*, 152 n.
- Dictators, 52, 95
- Dies, Congressman, 7 n.
- Differentiation, of products, in monopolistic competition, 74-75, 256, 256 n.
- Director, Aaron, and Douglas, Paul H., *The Problem of Unemployment*, 16 n.
- Directors, of corporations, 264
- Discounting, of future price changes, 173, 207
- Discrimination. in price policy of monopolies, 76; in government subsidies, 123, 270; minimizing of, permitted by policy of guaranteeing aggregate consumer spending, 26, 268-270
- Disemployment, contrasted with unemployment, 37
- Disguised unemployment. *See* Unemployment
- Dis-hoarding. *See* Hoarding
- Disinvesting. *See* Investing
- Distribution of income. *See* Income distribution
- Distributists, 177 n.
- Dividends. *See* Profit
- Division of labor, 15
- Dobb, Maurice, 144 n.
- Domestic policy, primacy of, for U. S., 1, 184-185
- Douglas, Major, 132
- Douglas, Paul H., and Director, Aaron, *The Problem of Unemployment*, 16 n.

Durable consumer goods, 154 n., 194 n., 218 n.; timing of replacements of, 154-155; consumer credit and, 180-183, 200
Dynamic system, 32

EARNED incomes. *See* Income
Economic imperialism. *See* Imperialism

Economic planning. *See* Planned production

Economics, literature of, 51, 51 n.
See also Classical economics; Mercantilism; Underconsumption; Cycle; Smith; Marx, Chamberlin; Keynes

Economy. *See* "Optimum allocation"

Education, 14, 83, 96, 98, 105, 166, 167

Efficiency: requirements for maximum, 40, 44; relative, as basis for international trade, 3; technological aspect, 48; alternative ends as well as means, 48; of labor, 143, 161; of small-scale production, 177 n.; relation to competitive production for market, 110. *See also* "Optimum allocation"

Effort and satisfactions, in definition of "optimum allocation," 47

Egypt, 103

Elasticities of supply, demand, 122 n., 163, 255

Electric power, 69, 70-71, 76, 96, 121, 233 n., 270

Emergency public employment: need for, in absence of regular employment, 90; estimated extent of, in U. S., (1933-39) 39, (March, 1940) 19 n.; relation to unemployment statistics and concept of involuntary unemployment, 38-

40; flexible offset to fluctuations in regular employment, 24, 25, 113-114, 153, 155, 158, 169, 183, 192, 211, 231-233, 249, secondary role of, in a full-employment market economy, 24, 88, 115-116, 135, 209 n.; advance planning of, 113, possibility of adverse repercussions on production for market, 114; possibility of favorable repercussions, 114-115, 269-270

Employment: relation of trend to production trend, 19-22, 65-66, 136, 142, 160-167, to unemployment trend, 21-22, 161; part-time, 37; indirect, 90; secondary, 90; human *vs.* other production factors, 41-42. *See also* Unemployment; Full employment

Employment exchanges, 166. *See also* U. S. Employment Service
England, 6, 104

English writers on economic policy, 5

Enterprise, private. *See* Production for market

Enterprisers. *See* Entrepreneurs

Entrepreneurial withdrawals, 215 n.

Entrepreneurs, 264-265, role in nineteenth-century America, 130-132; interest in full employment, 11, 265-266; importance of managerial initiative, 55-56, 109-110, 254; remuneration required by, 147, 226-227, 238-239, 265
Equalitarian sentiment in U. S., extent of, 13

Equality of income, arguments for and against, 52-53

Equations, 58 n., 79 n., 144 n., 232-233

Equilibrium, 3, 51 n., 92, 133, 144, 170, 210, 260

Equimarginal returns, 49
 Excess plant capacity, 41-42, 107, 153
 Exchange, Exchange funds, Exchange rates, etc. *See* Foreign exchange
 Expansion, territorial, in nineteenth century, 6, 130, 196. *See also* Foreign policy*
 Exploitation of cheap foreign labor and sources of raw materials, 4
 Exports *See* Foreign trade
 External economies, 82
 Ezekiel, Mordecai, 36 n.; \$2500 a Year, 270 n.

FACTORS governing employment, the, chap vi (141 ff)

Factors of production, market valuation of, 143-144, 144 n., 150, 151, 161-162, 165 n., 256

Farmers and farming, 3, 7, 8 n., 17, 42-43, 65 n., 66, 72, 81, 84, 105, 133, 148, 163, 166, 264; markets improved by full employment, 11; surplus agricultural population the result of lack of job opportunity elsewhere, 43

"Fear of goods," 5

Federal Emergency Relief Administration (F.E.R.A.), 39

Federal Farm Board, 93 n.

Federal Reserve: banks, 4 n., 68 n., 93 n., 202 n.-203 n., 241 n., 245 n.; Board, 20, 68 n., *Bulletin*, 4 n., 20 n.; indexes, 20, 20 n., 68 n., 218; instruments of control, 250; notes, 203 n., 214; system, 250; relation of government to, 249-250

Federal Surplus Commodities Corporation, 230 n.

Financial charges, 142, 150-153

"Financial prudence," 121 n., 142, 153, 154, 160

Fiscal policy. *See* Budget; Government borrowing, Taxation; Money, Monetary controls

Fisher, Irving, *Stamp Scrip*, 239, 239 n.

Five-year plans. *See* Soviet Union

Flexibility, in production planning, 87, 96, 105-106, 108

Flight from money, 206

Flight of capital, 263, 266

Flow of money. *See* Monetary circulation

Food-stamp plan, 230 n.

Forced labor, 30, 100 n.

Forecasting, of demand, 130, 132

Foreigners, "solution" of unemployment problem at expense of, 5-9

Foreign exchange: fixed pars under international gold standard, 8, 187; principle of flexible rates, 175, 186-188; exchange dealings by government, 188, exchange funds, 4 n., 188, 193; exchange rationing, 186-187, 188

Foreign investment, 1, 4, 6, 7, 25, 133, 137, 176, 178 n., 184, 185, 189-194, 196, 210-211, 266-267, U. S. experience in 'twenties, 4; speculative short-term capital movements, 188, 192-193, 261, 263; regulation, 188, 189, 192-194, 243, 261, 263-264, 266-267

Foreign loans. *See* Foreign investment

Foreign policy: unemployment in U. S., not capable of permanent solution by, 1, 4, 184-185; some natural roots of external expansion and aggression, 4-8; working assumptions regarding desirable policy for U. S., 1-4

Foreign trade, 1-9, 94, 133, 137, 184-194, 262-263. *See also* Free trade; Protectionism, Tariffs

Formal economic analysis, limitations of, 50-51, 103, 110

Foster, 132

Free choice of occupations, 30, 56, 101 n., 108-109

Free coinage, 214

Freedom of action, individual: inevitability of limitations on, 59-60; a full-employment market economy and, 253, 264-268

"Free" goods, 129 n., 177, 210, 255

Free trade, 3, 5, 7-8, 262

Frictional unemployment. *See* Unemployment

Frontier, passing of, 131

Full employment: the term discussed, chap. i (29 ff.); defined, 29, 32, 36; might be termed optimum volume of employment, 29, compatible with voluntary unemployment, 29, 30, 47; and with "normal" frictional unemployment, 29, 46-47; factors other than labor not considered under this heading, 41-42; similarly with "disguised unemployment," 42-43; quantitative relation to the principle of job opportunity as such, 18 n.-19 n., 43, 54; precision or measurability of the concept in other respects considered, 29 n., 31, 45, 46-47, 53-55, 60; condition achieved in slave states of antiquity, such as Egypt, 103; in Soviet Union, 99-100, 99 n.-100 n.; criticism regarding Soviet Union, 100, 100 n.-101 n.; evaluated, 101; may be achieved temporarily by means of war, aggressive foreign policy generally,

or accidental causes such as inventions, 1, 22-23, 94

Full employment problem contrasted with problem of "optimum allocation," 2, 40-43, 44-46, 47, 53, 55, 60-61, 95, 102

Permanent full employment: generally desired, 9; but may be opposed by some, 12, 271-273; will shift distribution of income and power in favor of labor, if democracy is upheld, 11, 224, 264, 271-272; will also benefit most others through increased income or increased security, 11-12; condition thought by classical economists to occur automatically, 3, 5, 24, 26, 92-93, 128, 128 n., 256; actually, it must be organized, 15; cannot be obtained in U. S. by an aggressive foreign policy, 1, 4, 94, 184; not assured by New Deal policy, 89, 90-91, 93-94, 135; or by traditional Republican policy, 89, 91-94, 135; can be assured by domestic economic measures, 1, 9; either by planned production or by production for market, 10-11, 23-26, 253; unlike "optimum allocation," can be established once and for all, 61; how secured under planned production, 87, chap. iv (95 ff.); how secured under production for market, (first principles) 88, chap. v (112 ff.), (further discussion) chaps. vi-ix (141 ff.); operation of such an economy contrasted with operation of our present contracting-expanding economy, 178-179, 256, 261-264; general summaries, 23-26, 135-138, 168-169, 210-212, 247-250, 264-268

See also Employment; Unemployment
Full-employment equilibrium rates
of money-wages. See Wages

GALLUP poll, 9, 9 n.
George, Henry, 239
Germany, 206
Gesell, Silvio, 239, 239 n.
Gill, Gorrington, 21 n; *Wasted Manpower*, 19, 19 n.
Giro systems, 117 n.
Gold, 4, 5, 185-186, 188, 203 n., 214, 234, 268, U. S. holdings of, 4, 4 n, 186
Gold certificates, 203 n.
Gold standard, international, 8, 186
Government and banking, relations between, 119-120, 120 n., 234, 235-236, 241, 241 n, 242 n.-243 n, 244, 249-250, 267-268, 272-273. See also Foreign investment, regulation
Government borrowing (bonds, etc.), 25, 203 n., 216, 222, 222 n, 229, 233-235, 237, 244-246, 249, 266, 272; compulsory loans to government, 206, 235-236, 241, 242 n., 245, 246, 267
Government debt, 228 n., 237, 246, 267, 272
Government jobs. See Planned production; Emergency public employment
Government lending, 182, 216, 228-229, 234, 249
Government orders, purchases, contracts, 84, 231-233, 269-270; and individual consumer spending, 25, 141 n., 177-179, 179 n., 192, 210
Government's "credit," 235, 272
Greenbacks, 244
Gregory, T. E., 100 n.

Guarantee of aggregate consumer spending. See Consumer spending, "National income insurance" "Guns" and "butter," 44, 103, 178-179

HABERLER, GOTTFRIED
VON, *Prosperity and Depression*, 130 n.
Half-measures, dangers of, 273
Hands-off policy, 90, 91. See also *Laissez faire*
Hansen, Alvin Harvey, *Full Recovery or Stagnation?*, 133 n.
Harding, President, 93
Hayek, F. A. von: *Collectivist Economic Planning*, 79 n., 86, 86 n.; *Prices and Production*, 177 n.
Heckscher, Eli F., *Mercantilism*, 5, 5 nn.
Heresy, economic, 132
Hoarding, 25, 137, 195, 199, 200, 202-209, 214, 216, 217, 223, 228, 229-230, 236, 245, 266, 268, defined, 194 n., measures to control, 206, 230, 230 n., 235-236, 239-244, 246, 267
Hobson, 132
Hogben, Lancelot T., *Retreat from Reason*, 2 n.
Home-mortgage credit, 180, 180 n., 181, 182 n.
Hoover, President, 42-43, 93
Horse and cart of economics, 128-134
Hours of work, 30-31, 35, 97, 167; decline in length of working week (1929-39), 20, 20 n., 21
Housewives, 30
Housing, 59, 61, 96, 178, 233. See also Durable consumer goods
Hubbard, Leonard E., *Soviet Trade and Distribution*, 100 n.

100 per cent reserve plan, 203 n., 236 n., 242 n.-243 n.

IDEAL output. *See* "Optimum allocation"

Idle plant capacity. *See* Excess plant capacity

Immigrants, 7, 32, 131

Imperfect competition. *See* Competition

"Imperfection": in labor market, 33, 225, in loan market, 234

Imperialism, economic, 1, 4, 6, 9, 193-194, 267; Marxian theory of, 6

Imports. *See* Foreign trade

Imputation process, 13, 143-144, 162, 165 n., 170, 178 n.

Incapacity for work, 30, 31, 167. *See also* Unemployables

Incentives to work: rewards, 53, 226, 226 n.; penalties, 271-272. *See also* Initiative

Income: forms of, 51 n., 121, 121 n., 215, 221; earned and unearned, 12, 227

Income, national: estimated loss of, through depression unemployment (1930-37), 15 n.; estimated annual income and expenditure (1919-38), 129 n. *See also* "National income insurance"

Income distribution: relation to "optimum allocation" by way of demand for products, 29 n., 45, 49-53, 61, 73, 105, 107, 161; by way of effect on incentive to effort, 53, 226, 226 n.; relation to labor supply, 29 n., 31, 47, 53-55, 60, 167, 226 n.; avoidance of problem by economists, 50-51, 51 n.; defense of existing distribution by economists, 51-52, 52 n.; present inequalities, 45,

53-54, 61; effect on volume of savings, 199, 199 n., 217, 258, on liquidity requirements, 204 n.; effect of government borrowing, 237, historic association of production for market with inequality, 107 n.; possibility of harmonizing any desired distribution with production for market, 12-13, 107, 224-227, 226 nn.; American sentiment regarding equality and inequality, 13-14; general principles of desirable distribution, 52-53, redistribution in favor of labor to be expected to result from full employment, if democracy is upheld, 11, 224, 264; price inflation as a mechanism for avoiding redistribution, 227; rate of social saving and distribution of income through time, 57, 194

Incomes, real vs. money, 173-174

Indexes: general business, 2; industrial production, 20, 20 n., 68 n.; iron and steel production, 68 n.; employment and unemployment, 16, 34, 183, 249; wholesale prices, 171, income payments, 218; department store sales, 218; consumer spending, 218-219, 249

Industrial Expansion Bill of 1937, 270 n.

Industrial revolution, 163

Inequality of income, arguments for and against, 52-53

Infant industries, 263

Inflation. *See* Price inflation

Initiative, of production management, 56, 110, 147, 226-227

Insecurity due to unemployment, 15, 272

Installment selling, 133, 180-182, 182 n.

- Insurance, 121, 121 n., 142, 150, 152, life-insurance policies as channel for savings, 194 n., 201, 215, 235, 266, emergency public employment as job-insurance mechanism, 113-114. *See also* "National income insurance"
- Integration, of production, 204
- Interconsumer payments, 216, 218 n., 220
- Interest: as component of income stream, 121, 121 n., 215, 221; Senior's theory of, 51 n., as cost affecting the volume of production, 142, 150, 151, 153, 172; gross interest, 151
- Interest rates: effect on volume of production for market, 195, 209 n.; traditional bank-rate theory, 209 n.; effect on "roundaboutness" of production for market, 151-152, 154, 195-196, 204, 209 n., role in classical theory, 128, difficulty with time-preference theory, 200-201, 201 n., relation to desire for liquidity, 195, 202, 204-206, 208, 208 n.; relation of anticipated changes to desire for liquidity, 195, 204, 205, 207-208, 208 n., 209, 241, 260-261, to capital formation and general business activity, 156, 195, 206, 209; wasteful effects of unforeseen changes, 206-207, 209, desirability of responsiveness to majority public opinion, 195, 208-209, 211, 236, 240, desirability of a controlled and generally stabilized trend, 157, 195, 209, 209 n., 211, 269; difficulty of establishing a low rate without causing excessive hoarding, 204-206, 208, a zero rate, 205; enforcement of a low rate, 240-243, short-term and long-term rates, 240, 240 n., likelihood of a low rate in a full-employment economy, 26, 266-267; selective rates, 241 n.; relative interest rates and foreign-exchange policy, 186, 189, 193, 266-267, relation of interest policy to problem of quantitative estimates in general, 247; net interest rate a baseline for profit, 147-148, 226-227, 238-239, 265
- International cooperation, desirability of, 184-185, 188, 194
- International Labor Office, 100
- International loans. *See* Foreign investment
- International payments. *See* Balance of payments
- International trade. *See* Foreign trade
- Interproducer payments, 121-122, 204, 216, 220
- Interstate trade barriers, 7-8
- Interventionism, 86, 124 n.; contrasted with positive planning, 86; need for, minimized if aggregate consumer spending is guaranteed, 26, 136, 268-270
- Invention, 6, 57, 94, 109, 130, 131, 155, 157, 162, 196, 197, 207. *See also* Technological progress
- Inventories, 154, 156, 172, 194 n.
- Investing, 26, 121, 121 n., 122, 137, 201, 215-217, 219, 221-222, 228, 229-230, 230 n., 235, 242-243, 268; defined, 194 n.
- Investment, as a financial process. *See* Investing, *see also* Foreign investment
- Investment, as a physical process. *See* Capital formation
- "Investment demand-schedule," 157

Involuntary unemployment. *See* Unemployment

JEWELRY, 243

Job opportunity. *See* Opportunity

Job placement, 34, 166

Job retraining, 34, 166

Jobs. *See* Employment

Justice, as function of government, 84, 91 n., 105

KEYNES, JOHN MAYNARD:

The General Theory of Employment, Interest, and Money, 5 n., 6, 35 n., 46, 90 n., 92, 145 n., 156, 208 n., 239, 241; *How to Pay for the War*, 179 n.

LABOR, Department of, 16

Labor market, 13, 230, 256

Labor-saving devices. *See* Technological progress

Labor supply, 16-17, 20-22, 30-31, 96, 97, 143 n., 161, 167-168, 174; defined, 30; categories technically excluded, such as time worked by housewives, 30, 98; relation to job opportunity, 18-19 n., 43, 54; to income distribution, 29 n., 31, 47, 53-55, 60, 167, 226 n.; other governing factors, 30-31, 54, 167, 226 n.; relative supply in different kinds of work, 55, 56, 108-109, 226 n.

Laissez faire, 5, 73, 86, 91, 92, 93, 93 p., 262; contrasted with production for market, 71, 78

Land, 41, 42, 205; values, 205, 243

Lange, Oskar, 6, 6 n.

Lausanne school, 51 n.

League of Nations, 130 n., 132, 133 n.

Leisure: as voluntary unemployment, 30-31, 47, 54; source of

new wants, 97, expansion of, with increasing productivity, 31, 97-98

Lenin, 6 n.

Leven, Maurice, 246 n.

Liquidity requirements, 202-209, 235, 242-243, 246. *See also* Hoarding

Little business, 84-85, 109, 131, 234, 264

Loan market, 92, 92 n., 198, 199 n., 200, 201 n., 256

Loeb, Harold, *The Chart of Plenty*, 105 n., 246 n.

"Long-term expectation, state of," 156

Loss. *See* Profit

Lotteries, 229

MAJORITY opinion, 9-10, 13, 14, 23, 53, 116, 226, 271-272, 273. *See also* Democracy

Malthus, T. R., *Principles of Political Economy*, 128 n.

"Malthusian devil," 101 n.

Managers. *See* Entrepreneurs; Wages of management

Marginal cost. *See* Costs

Marginal economics, 52 n.

"Marginal efficiency of capital, schedule of," 157

Marginal productivity: and wage rates, 12-13, 35, 35 n., 143, 162, 225, 226 n.; and prices of factors generally, 143, 150, 162

Marginal revenue, 73-74

Marginal utility: of individual income, 52; of goods *vs.* leisure, 31, 54

Market, Market economy, Market system, etc. *See* Production for market

Markets, foreign. *See* Foreign trade

Markets, Say's theory of, 128 n.

- Marshall, 52 n.
 Marx, 5-6
 Marxian theory of imperialism, 6
 Mass-production methods, 87, 97, 98, 106, 163, 166
 Master plan. *See* Planned production
 Meade, J. E.: *An Introduction to Economic Analysis and Policy*, 35 n., *Consumers' Credits and Unemployment*, 134 n.
 Medical service, 59, 96, 255
 Mellon, Secretary, 93 n.
 Mercantilism, 1, 1 n., 5, 5 nn., 9
 Methodology in dealing with present economic problems, 41-43, 44-46, 102, 137-138
 Middle Ages, 7
 Mill, John Stuart, *Principles of Political Economy*, 226 n.
 Minimum standards of health and decency, 51
 Minimum wages. *See* Wages
 Mitchell, Wesley C., *Business Cycles: The Problem and Its Setting*, 130 n.
 Mobility of Labor, 33
 Monetary authority. *See* Monetary controls; Government and banking
 Monetary circulation, the, 117-123, 213-222
 Monetary controls. under planned production, 119; in the Soviet Union, 119 n., in a full-employment market economy, 24-25, 116-127, 135-137, 188, 192-193, 212, chap. viii (213 ff.); general principles, 185, 247-250, 267-268, ultimate significance, 271-272
 Monetary metal. *See* Bullion
 Monetary planning, in a full-employment market economy, 10, 67 n., 127
 Monetary system, in nineteenth-century England, 6
 Monetary theorists, 132
 Money. defined, 117 n.; terminological difficulties, 117 n., 202, bank, 202-203, 213-214; "calendar," and stamp scrip, 242; dated, 243 n.; government, 25, 206, 209, 213-214, 244-246, 267; "hot," 240 n., nontransferable, 220 n., conventional rules of, 8, 246, 247-248; demand for, 202-209, 235, 242-243, 246; demand for foreign, 243, flight from, 206; interchangeability of various forms of, 214, quantity of, 195, 202, 237, 243 n., 245-246; quantity theory of, 261-262, possible separation of consumer and producer forms of, 219-222; special forms of, 230 n.; supply of, 130, 202-203, 245 n.; transactions, coefficient of, 177 n.; unit of, as measure of value, 49, unofficial forms of, 177; value of, 156, 245 n.
 Money market. *See* Loan market
 Money's role in a system of planned production, an unplanned market economy, and a full-employment market economy compared, 119-120, 120 n.
 Monopolistic competition. *See* Competition
 Monopoly. defined as ability to exclude rivals, 75; economies of, 73-74; restrictive practices of, 24, 26, 36, 45, 73-76, 118, 131, 148-149, 163, 165, 169, 172, 256-257, 259; profits of, 13, 75, 148-149, 165-166, 169, 238; effect on competitive producers,

- 131, 148-149, 257-258; relation to income inequalities, 45, 149, 258; to political power, 258; to a program of controlling employment by guaranteeing aggregate consumer spending, 258-259, methods of social control, 13, 76-77, 259-260
- Monopoly over the opportunity to make a living, 15
- Monopoly Control Bill of 1939, 270 n.
- Mortgage credit. *See* Home-mortgage credit
- Mortgages, as channel for savings, 215
- Moulton, Harold G., 246 n.
- Multiple solutions of market equations, possibility of, 58 n.
- Multiplier, 90
- NATHAN, ROBERT, 17**
- National Bureau of Economic Research, 130 n.
- National defense. *See* Defense
- National Economic and Social Planning Association, 21 n.
- National income. *See* Income, national
- "National income insurance," 25, 136, 137, 168, 179, 222, 258, 259, 268, 271. *See also* Consumer spending
- National Industrial Conference Board, 17
- National planning. *See* Planned production
- National Recovery Administration (N.R.A.), 70
- National Research Project, 21, 21 nn.
- National Resources Committee: *Structure of the American Economy*, 3 n.-4 n., 15 n., 65 n., 129 n., *Consumer Expenditures in the United States*, 199 n.; *Patterns of Resource Use*, 246, 246 n.
- National Survey of Potential Product Capacity, 105 n., 246 n.
- National Youth Administration (N.Y.A.), 19 n., 39
- Natural laws, in classical economics, 51 n.-52 n.
- Natural resources, 2, 41, 42-43, 57, 96, 130, 143, 161-162, 196, 199-200
- New Deal, 89, 90-91, 93-94, 135
- Nineteenth century: America, 94, 130-131, 196; England, 6
- Nixon, Russell A., 18 n.
- Noninterest-bearing notes, 233, 244-246, 249, 273; objections raised against, 244-245, 245 n., 268, 273
- Nonmonetary transactions, 177, 177 n., 210-211, 262
- Nourse, Edwin G., *America's Capacity to Produce*, 246 n.
- Nugent, Rolf, *Consumer Credit and Economic Stability*, 180 n., 182 n.
- OBSCOLESCENCE, 142, 150 n., 152, 157, 196, 197, 206-207**
- Old-age pensions, 229
- Oligopoly, 75
- Open-book credit, 180, 181, 215 n.
- Opportunity to work, fundamental nature of, 15, 268; to work, as factor affecting the supply of labor, 18 n.-19 n., 43, 54; to be trained for preferred occupations, 56, 108-109, 264
- Opposition to full employment as such, 12, 271-272, 273; to specific measures, 244-245, 267-268, 272-273; to a small "normal" quota of frictional unemployment, 33

- Optimism, business, 123, 130, 131, 132, 158, 159-160. *See also* Confidence
- "Optimists," 51 n.
- "Optimum allocation" defined in terms of effort and satisfactions, 47, or costs and returns, 48-49, 106-107, 110, a component of maximum efficiency, 40, 44, of waste avoidance, 41-42, 44-45, 48, problem seen as *the* economic problem by classical economists, 46; but secondary to problem of full employment in U. S. today, chap. ii (44 ff.); a perennial problem, 61, solution not prerequisite for solving unemployment, 60-61; full utilization of factors other than labor an aspect, 41-42; also "disguised unemployment, 42-43; difficulty of precise identification or measurement, 45, absolute optimum impossible in practice, 47, concept highly complex, 46-49, 60, valid only in relation to a given income distribution, 49-53, 73, 107, 161; hence multiple optima exist unless some particular income distribution can be identified as best, 29 n., 50-52; the problem of income distribution in relation to incentives to effort, 53, 226, 226 n.; other considerations: monopolies, 45, 73-76, 257; bureaucracy and system's overhead costs, 55-56, 110, 254, free choice of occupations, 56-57, 108; working conditions in general, 56-57, 108-109; conservation and development of natural resources, 57, 96; encouragement of invention and improvement, 57, 109; a rate of social saving responsive to public opinion, 57, 60, 194-195, 211; difficulty with production subsidies, 123-124, 124 n., 270, individual *vs.* collective decisions, 57-60, the problem in a system of planned production, 95, 99, 101-111
- "Optimum allocation" problem contrasted with problem of full employment, 2, 40-43, 44-46, 47, 53, 55, 60-61, 95, 102
- "Optimum volume of employment," 29, 29 n.
- Organization of labor, and increased wage demands, 131. *See also* Trade unions
- Orthodox economics, 52 n., 132. *See also* Economics, Classical economics
- Output determination for the individual production unit: miscellaneous procedures, 66-67, alternative principles of planned production and production for market, 10 n., 67-69. *See also* Planned production; Production for market, Competition, Monopoly
- Output restriction agreements, 66, 70. *See also* Monopoly
- Overdrafts, 117 n.
- Overhead costs, 153, of economic system, 55-56, 109-110, 254
- Overproduction, 128, 128 n.
- P**ARETO, 51 n.
- Part-time employment. *See* Employment
- Patch, Buel W., 230 n.
- Patents, 165, 260
- Payroll subsidies. *See* Subsidies
- Peace, general desire for, 9-10
- Pessimism, business, 159, 160. *See also* Confidence

- "Physiology of normal social health," 138
- Pigou, A. C., *The Economics of Welfare*, 58 n., 82 n
- Planned production: defined, 10 n., 68-69, contrasted with production for market, 10-11, 15, 23-24, chap. iii (65 ff.), 98, 109, 110-111, 119-120, 187, 253-254; theoretical convergence with production for market, 79-83, 253-254, elements of, in any market economy, 10, 83-84, 85-87, 88-89, 91 n., 112-114, 253-255, 260, 269; apparent advantage of simplification, 79, 254; democratic possibilities, 104, 109, 110; problem of centralization and bureaucracy, 55-56, 109-110, 254; of unfamiliarity, 11, 110-111, 254
- System of planned production: defined, 85; fringe of production for market in, 84-85, 109, single master plan, 85, 116; role of price, 98; of money, 119, 119 n.; relation of costs and demand, 129; exchange rationing, 187; Soviet Union, 23, 84-85, 99-101; slave states of antiquity, 103; full employment by planned production, 10, 23-24, 87, chap. iv (95 ff.); problem of "optimum allocation," 95, 99, 101-111
- Planning, confusing terminology of, 10 n., 67 n.-68 n., 93 n., 127
- Planning commission, 80, 105, 108, 109
- Policy, "some guides to," chap. vii (170 ff.)
- Political and social issues raised by a full-employment program, 11-15, 33, 90, 114, 159, 223-228, chap. ix (253 ff.)
- Population, size of, 6, 56-57, 130, 167-168, 174, 196, 204. *See also*
- Labor supply
- Postal service, 70
- Precious metals. *See* Bullion
- President's Committee on Economic Security, 17
- Press, freedom of, 14
- Pervailing wages. *See* Wages
- Price, role under production for market and planned production compared, 98
- Price inflation, 244, 272, 273; guarantee of amount of aggregate consumer spending, as safeguard against, 12, 26, 171 n., 222-228, 271
- Price-level policy, 25, 137, 146, 170-176, 189, 203, 210; relation to world price levels, 175, 188-189; to price competition, 173 n., relation of consumer spending guarantee to, 171, 176, 248 n.
- Prices: administered prices, 75, 257; price competition, 118, 173 n.; price-fixing agreements, 66, price flexibility, 24, 117, 118, 128, 135; price rigidities, 24, 114, 118, 124 n., 131, 135, 165, 172; price leadership, 66; price regulation, 67, 76, 175, 260; complicated interrelation of factor prices, 144 n.; effects of price changes, 130, 172-173, 177 n.-178 n., 206-207; of anticipated price changes, 142, 145, 154, 156-158, 172-173, 177 n.-178 n., 196, 206; effect on price levels of changes in the volume of government orders, etc., 177-178; of consumer credit, 183, of foreign investment, 191-192; relative price levels under international gold standard, 186

- Primary functions of government, 85, 91 n., 112
- Principles: of output determination, 67-69, of desirable income distribution, 52-53; of a full-employment market economy, chap. v (112 ff.), 168-169, 210-211, 247-250
- Priorities, under planned production, 96
- Producer goods. *See* Capital goods
- Production expense and purchasing power, the cart and the horse of economics, 128-134
- Production for market: defined, 10 n., 68; contrasted with planned production, 10-11, 15, 23-24, chap. iii (65 ff.), 98, 107, 110-111, 119-120, 187, 253-254, theoretical * convergence with planned production, 79-83, 253-254; relation to production for profit, 69-78; to accounting, 69-70, 71, 77; to *laissez faire*, 71, 78; limitations, 57-60, 58 n., 104-105; advantage of decentralization, 10-11, 55, 78, 79, 110, 120, 268, theoretical possibility of centralization, 79, 79 n.; problem of worker-manager relations, 56-57; historical association with inequality of income, 107 n.; relation to American tradition, 11, 110-111, 225, 254
- Full-employment market economy, 10, 11, 12, 24-26, 88; first principles, chap. v (112 ff.); further discussion, chaps. vi-ix (141 ff.); some planned production necessarily included, 10, 83-84, 85-87, 88-89, 91 n., 112-114, 253-255, 260, 269; but independent regulator of total volume of production for market needed to prevent undesired transformation into system of planned production, 24, 112-116, 123-124, 135, 159, advantage of definite boundaries between the two areas, 255; role of prices, 24-25, 98, 116-118, 135, role of money, 24-25, 116-120, 271-272, resemblances to Ricardian world, 256, 261-263; to present economic system, 256-261, contrast with present contracting-expanding system, 178-179, 256, 261-264, international economic relations, 184-194, 262-264, minimization of intervention, discriminations, change, 26, 136, 254, 268-270
- "Production for use," 70
- Production planning. *See* Planned production
- Production unit, 65, 65 n.
- Professional workers, 109, 218, 264
- Profit as component of income stream, 121, 121 n., 215, 221, profits of pure competition, 73, 147, 238; of monopolistic competition, 75, of monopoly, 13, 75, 148-149, 165-166, 169, 238; variations in accounting definition, 77-78, 148, 153, 163, undistributed, 121 n., 200-201, 201 n., 217, 239; production motivated by anticipated, not realized, 68, 68 n.; coöperatives and, 72; production for, compared with production for market, 69-78
- Profit motive in nineteenth-century England, 6, in nineteenth-century America, 130-131, individual profit requirements in relation to other income shares (interest and wages), 147, 226-227, 238-239, 265, condition of zero excess profit for the system as a whole,

- 147, 148, 149, neutral profit situation, 147, 149, 153, 165; aggregate amount of necessary profit, 142, 147-149, 150, 154, 160, 165, 166, 238, 257
- Program, need for a, 23, 137-138
- Promoters, financial, 264
- Propaganda, 10, 60
- "Propensity to save," 237
- Proprietors. *See* Entrepreneurs
- Prosperity, 12, 134 n., 155, 265; U. S. dependent on domestic measures for permanent, 1
- Protectionism, 5, 7-8, 262-263
- Public borrowing, Public contracts, Public debt, Public lending. *See* Government borrowing, Government contracts; Government debt, Government lending
- Public "credit." *See* Government's "credit"
- Public finance. *See* Budget; Government borrowing; Taxation; Money; Monetary controls
- Public investment, 89-90, 198. *See also* Capital formation, Construction; Planned production; Emergency public employment
- Public opinion. *See* Majority opinion
- Public opinion, agencies of, 14
- Public ownership and operation. *See* Planned production, Political and social issues
- Public utilities, 67, 69, 70-71, 76, regulation of, 67, 76, 148, 269
- Public work, Public works, Public employment. *See* Planned production; Emergency public employment
- Public Works Administration (P.W.A.), 38 n., 39, 113
- Purchasing power: general concern with, 132-134, 134 nn., 248; and production expense, the horse and the cart of economics, 128-134. *See also* Consumer spending; "National income insurance"
- Pure competition. *See* Competition
- Pyramids, 103
- Q**UALITY standards, in consumer goods, 59
- Quantitative control. *See* Monetary controls
- Quantitative estimates, problem of, 246-247
- Quantity theory of money, 261-262
- R**ADIO, 14; industry, 197
- "Rational calculus," in allocation of resources, 79 n.
- Rationing, 99, 104; foreign exchange, 186-187
- Raw materials, 2-3, 4, 66, 150, 156, 196
- Real estate, 215, 243. *See also* Land Reconstruction Finance Corporation (R.F.C.), 124 n.
- Recreation facilities, 59, 96
- Redistribution of income. *See* Income distribution; Taxes
- Reemployment. *See* Unemployment, frictional
- Regional specialization, 3, 263
- Regulation. *See* Monopolies, Public utilities
- Regulator, for volume of production for market, 24-25, 112-118, 135
- Relief payments, 15, 133, 145, 215
- Rent, of land, 51 n., 121, 121 n., 162, 205, 215, 239, 243
- Rentschler, Frederick B., 201 n.
- Replacements, of durable equipment, 121 n., 153, 194, 196-197; timing of, 142, 154-155, 169, 197

- Republicans, 124 n.; traditional policy, 89, 91-94, 135
 Research, scientific, 96, 105
 Reserves. *See* Bank reserves; Depreciation, "Financial prudence"
 Retailers, 66-67, 218, 219, 221-222, 223, 238. *See also* Little business
 Retirement policy, as factor affecting the labor supply, 54, 167
 Returns. *See* Costs and returns
 Ricardian world, 46, 256, 261-263. *See also* Classical economics
 Ricardo, 256
 Riefler, Winfield W., *Money Rates and Money Markets in the United States*, 240 n.
 Risk: premium for, 147, 148, 149, 151; lender's risk, 234 n.
 "Risk money," 147, 227, 248, 265
 Robbins, Lionel, *The Great Depression*, 79 n.
 Robinson, Joan, 42 n.; *Essays in the Theory of Employment*, 35 n., 224 n.
 Roosevelt, President, 134, 134 n.
 Roundabout production. *See* Capital formation; Interest rates
 Royalties, 121, 121 n.
 Rubber, 2
 Russell Sage Foundation, 180 n.
 Russia. *See* Soviet Union

SALARIED executives, 264-265
 Salaries. *See* Wages
 Samuelson, Paul A., 18 n.
 Satisfactions: comparison of, of different persons, 49-53; and effort, in definition of "optimum allocation," 47, from work, 56
 Saving, 6, 25-26, 51 n., 121, 121 n., 122, 126, 130, 137, 215-216, defined, 194 n.; relation of income inequalities to amounts saved, 199, 217, 239, estimates for various income groups, 199 n.; business savings, 121 n., 199 n., 200-201, 201 n., position of savers in a full-employment market economy, 264, 266-268
 Rate of social saving, 57, 60, 126, 198, 211; defined, 194 n. *See also* Capital formation
 Savings banks. *See* Savings deposits
 Savings deposits, 194 n., 201, 215, 216, 235, 236 n., 242, 266
 Say, J. B., 128 n.
 Scale of output (production) and employment. *See* Output determination
 Scarcity, 87, 98, 129 n.
 Scherman, Harry, *The Promises Men Live By*, 245 n.
 Seasonal variations in employment, 16 n., 32, 34
 Securities, 121 n., 189, 191, 214, 222 n., 242, 266
 Securities and Exchange Commission (S.E.C.), 201 nn.
 Seizures, by government, 234, 267-268
 Self-employment, and "disguised unemployment," 42-43
 Self-liquidating vs. nonrevenue public works, 272, 272 n.
 Self-subsistence production, 42-43, 177, 177 n., 210-211
 Self-sufficiency, national, 2, 2 n.
 Senior, 51 n.
 Service trades, 98, 163, 166.
 Sickness, 178; as factor affecting the labor supply, 30, 31, 34, 167
 Silver, 203 n.
 Slavery, unemployment as a modern form of, 14, 14 n.
 Slave states of antiquity, 103
 Slichter, Sumner H., 224 n.
 Sloan, Alfred P., 201 n.

- Slumps. *See* Depressions; Cycle
- Smith, Adam, *The Wealth of Nations*, 91, 91 n., 103
- Snyder, Carl, 52 n.
- Social costs. *See* Costs
- "Social dividends," 229
- Social insurance, 99-100, 100 n., 151, 233; as a mechanism for regulating aggregate consumer spending, 134 n., 222, 229
- Social issues raised by a full-employment program. *See* Political and social issues
- Social Security Board, 17
- Social services, 210. *See also* "Free" goods
- "Sound finance," canons of, 244, 246
- Sovereignty. *See* Consumer sovereignty
- Soviet Union, 4 n., 23, 84-85, 99-101, 105 n., 119 n.
- Speculation, 250, 256, 260-261, 264, 266, and the level of business activity, 156, 157, 160, 175, 196; and short-term capital movements, 188, 192-193, 261; and liquidity preference, 208, 209, 241, 260-261
- Speed-up, 162
- Spending, government: reaction of private spending to, 89-90, 114-116; indecisiveness of arguments regarding, in present circumstances, 93-94
- Stabilization fund, 188, 193
- Stalin, 84
- Stamp scrip, 239 n., 242
- Static system, 31
- Statistical services, and consciousness of the problem of purchasing power, 132
- Statistics of unemployment in U. S., 15-22 (table [1920-40], 17); appraisal of, 16-19, 37-40, 43, 53-54
- Steel industry, 68 n., 163
- Stettinius, Edward R., Jr., 201 n.
- Stewart, Maxwell S., *Social Security*, 100 n.
- Stock market, 93 n., 133, 157, 216, 220
- Stocks, 194 n., 215, 264, 265
- Stocks, commodity, 154, 156, 172
- Strategic minerals, 3 n.
- Strikes, 13, 167
- Subsidies. to equalize private and social costs or returns, 82; to borrowers, 234 n.; difficulties with production subsidies, 123-124, 124 n., 269-270; subsidies contingent on production expansion, 270, 271 n.; payroll subsidies, 13, 35 n., 142 n., 151, 225, 226 n., 227. *See also* Taxes
- Subsidies to consumers, 229-230, 233, 234. *See also* "National income insurance"
- Subsistence farming, 42
- Substitutes, synthetic, for imports, 2
- Substitution, among competing factors of production, 144, 144 n., 161-162
- Summaries, 23-26, 135-138, 168-169, 210-212, 247-250, 264-268
- Supply-and-demand economy, 23
- Supply curve, possibility of downsloping, 35 n., 144 n.
- Supply of labor. *See* Labor supply
- T**ARIFFS, 3, 7-8, 93 n., 263
- Tastes. *See* Consumer tastes
- Taxes: business, 238; business net income or profit, 227, 238-239; estate and inheritance, 239; excise, 238; personal income, 239, payroll, 142 n., 151, 225; sales, 223, 238; undistributed profit,

- 239; on land values and economic rent, 205-206, 239, 243, on money, 25, 206, 230, 239-244, 245, 246, 267, 272, redistributive taxation, 13, 239; taxation for revenue, 233, 237, as a means of paying for "free" goods, 177, 255; as a means of equalizing" private and social costs, 82; as a means of reducing consumer spending, 134 n., 222-223, 237-238, taxes and subsidies, as a mechanism for regulating the volume of production for market, 25, 123, 142, 150-151, 153, 169, 183, 192, 231-232, 237-238; short-run inflexibility of most forms of taxation, 237-238
- Technical production data, 143, 154, 160-168, 174, 195-196
- Techniques of production, 96, 143, 154, 161-162, 174
- Technocrats, 97
- Technological progress, 11, 171, 197; and problem of maintaining employment, 20-22, 24, 32, 37, 65, 87, 97, 120, 163-167, 175; connection with problem of monopoly, 24, 165
- Technological unemployment. *See* Unemployment, frictional; Technological progress
- Temporary National Economic Committee (T.N.E.C.), 8 n., 21 n., 201 nn.
- Terms of trade, 193
- Territorial expansion. *See* Expansion
- Thrift, 5, 222, 261
- Time deposits, 117 n., 203 n., 216, 235, 236 n., 242 n.
- Time preference, 200
- Tin, 2
- Tinbergen, J., *Business Cycles in the United States of America*, 1919-1932, 133 n.
- Trade. *See* Foreign trade
- Trade paper, 215 n.
- Trade unions, 13, 131, 159, 260
- Traditions, American of production for market, 11, 110-111, 225, 254; of bank-rate movements, 209 n.; of checks and balances, 250; of demand for a people's money, 273
- Transfer problem, in international payments, 193
- Transportation, 65 n., 70, 76, 96, 121, 124 n., 150, 177
- Treasury, U. S., 4 n., 213, 213 n., 234, 237, 239, 246, 247; and banking authority, 249-250
- Trotsky, Leon, *Soviet Economy in Danger*, 84, 84 n.
- Trustees, as collectors of savings, 201
- UNCERTAINTY**, 123, 124, 157
- Underconsumption, 128 n.; theory, 132-133
- Undersaving possibility, 122, 126
- Underwriting of aggregate consumer spending. *See* Consumer spending; "National income insurance"
- Undistributed profit, 121 n., 200-201, 201 n., 217, 239
- Unearned incomes. *See* Income
- Unemployables, 30, 34; medical criterion for, 29, 35 n.
- Unemployment defined as involuntary unemployment, 29; voluntary and frictional unemployment, and unemployables, excluded, 29; technological and other displacement contrasted, 37; trend of, compared with trend

of employment, 21-22, 161; problem feared by mercantilists, 5; denied by classical school, 3, 5, 24, 26, 92-93, 128, 128 n., 256; linked to capitalism by Marx, 5-6; limiting factors, in nineteenth-century England, 6, in nineteenth-century U. S., 130-131; causes deeply rooted, 6; escape naturally sought through foreign policy, 7-8; but war or capture of foreign markets can alleviate only temporarily, 1, 4, 22-23, 94, 184; compared to slavery, 14; cause of enormous waste, 14-15, 15 n., 44-45, and insecurity, 15, 271-272

"Disguised unemployment," 42-43, 101 n.

Frictional unemployment, 29, 31-36, 107, 164; "normal" volume of, 29, 32-36, 46-47, 60, 96, 101, 101 n., 167, subnormal volume, 159-160, normal time-lag between disemployment and reemployment, 32-36

Involuntary unemployment, 18, 29, 32-33; defined, 34-35; *and see* main entry above

Voluntary unemployment, 29, 30-31, 38, relation to income distribution, 29 n., 31, 47, 53-55, 60, 167

Unemployment estimates in U.S., (1897-1926) 16 n., (1920-40) 25-22 (table, 17), general appraisal, 16-19, 37-40; treatment of emergency public employment, 38-40 (chart, 39); foreign practice contrasted, 38; part-time employment, 37; problem of "additional" workers, 18 n., 54; problem of absence of job opportunity as such, 18 n.-

19 n., 43, 54; potential additions from farm communities, 43; U. S. Employment Service as agency best suited to compiling an official index, 34, 40, 113

See also Employment; Full employment

Unemployment benefits, 100; as mechanism to counteract fluctuations in purchasing power, 134 n. Unemployment relief. *See* Relief payments

Unions. *See* Trade unions

U. S. Employment Service, 34, 40, 113

U.S.S.R. *See* Soviet Union

Utilities. *See* Public utilities

Utopianism, and the problem of abolishing unemployment, 11-12

VALUE theory, 36, 125
Velocity, 203, 262

Veterans' bonus, 133

Volume problem *vs.* problem of effective use. *See* Full employment; "Optimum allocation"

Voluntary unemployment. *See* Unemployment

Voorhis, Representative, 270 n.

Voting: economic, 57, 107, 107 n., 198-199, 199 n.; political, 107, 107 n., 199

WAGES: as component of income stream, 121, 215, 221; determination of, by collective bargaining, 13, 31, 146; by public commissions, 13-14; relation, of rates offered by employers, to imputed marginal productivity, 12-13, 35, 35 n., 143-144, 162; complications, 144 n., 161-162, 165 n., 177-178 n., 225; relation of volume of employment to

- money-wage rates, 24-25, 136, 141-142, 143, 145-146, full-employment equilibrium rates, 144, 167-168, 172, 174-175, 176; but critical consideration is net wage-rate cost to employers, not gross wage receipts of workers, 25, 142 n., 224-225, relation of volume of employment to changes in money-wage rates ambiguous under present conditions, but clear assuming aggregate consumer spending controlled independently, 144-146, 262; wage cuts generally undesirable, 146, 174-175; wage increases need not bring price inflation, 12, 171 n., 223-228; piecework rates and differentials in general, 226 n.; prevailing rates, in definition of full employment, 34-36, 38, 38 n., 40, 101 n.; minimum rates, 35 n., 38 n., 226 n.
- Wages of management, 77, 147, 159, 227, 238-239, 265
- Walras, 51 n
- Wants. *See* Consumer tastes
- War unemployment as predisposing factor, 8-9, alleviation of unemployment by, only temporary, 1, 22-23, 94, destruction in, and rate of capital formation, 196-197, frequency of, in nineteenth-century England, 6; present war and American sentiment, 9, and American unemployment, 22-23; aftermath, 22-23; Keynes plan regarding, 179 n.
- Warburton, Clark, 246 n
- Wastes of unemployment, 14-15, 15 n., 44-45, of wrong allocation, 41-42, 44-45, 48. *See also* "Optimum allocation"
- Webb, Sidney and Beatrice, *Soviet Communism. a New Civilisation?*, 100 n.
- Weekly wages, hours. *See* Wages; Hours
- Weintraub, David, *Unemployment and Increasing Productivity*, 21 n.
- Welfare. *See* Satisfaction
- Willkie, Wendell L., 14 n., 92, 92 n.
- Wolman, Leo, 17
- Workers. *See* Labor
- Working capital, 154
- Working conditions, 34, 35, 56-57, 100 n.-101 n., 108-109
- Working population. *See* Labor supply
- Works Projects (Works Progress) Administration (W.P.A.), 8 n., 19, 19 n., 38, 38 n., 39, 113
- Writers, 109, 265
- Y**ARDSTICK plants, 260
- Young, Owen D., 201 n.
- Youth severity of unemployment among, 20 n., relation to labor supply, 21, 30, 32, 167. *See also* N.Y.A., C.C.C.